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LAW AND FACTS
ON
PATENTS AND INVENTIONS.

HARVEY L. HOPKINS.



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LAW AND FACTS

ON

PATENTS AND INVENTIONS.

A PRACTICAL AND LEGAL BUSINESS GUIDE

FOR

DEVELOPING, PATENTING, PERFECTING, MANUFACTURING AND OPERATING
INVENTIONS. COMPILED FROM A LIFE OF EXPERIENCE.

WHAT TO DO AND WHAT NOT TO DO.

*"Experience is the best teacher" and "It is a wise man who profits
from the experience of others."*

BY HARVEY L. HOPKINS.

See alphabetical index under both "Law and Facts" and
quickly turn to your case.



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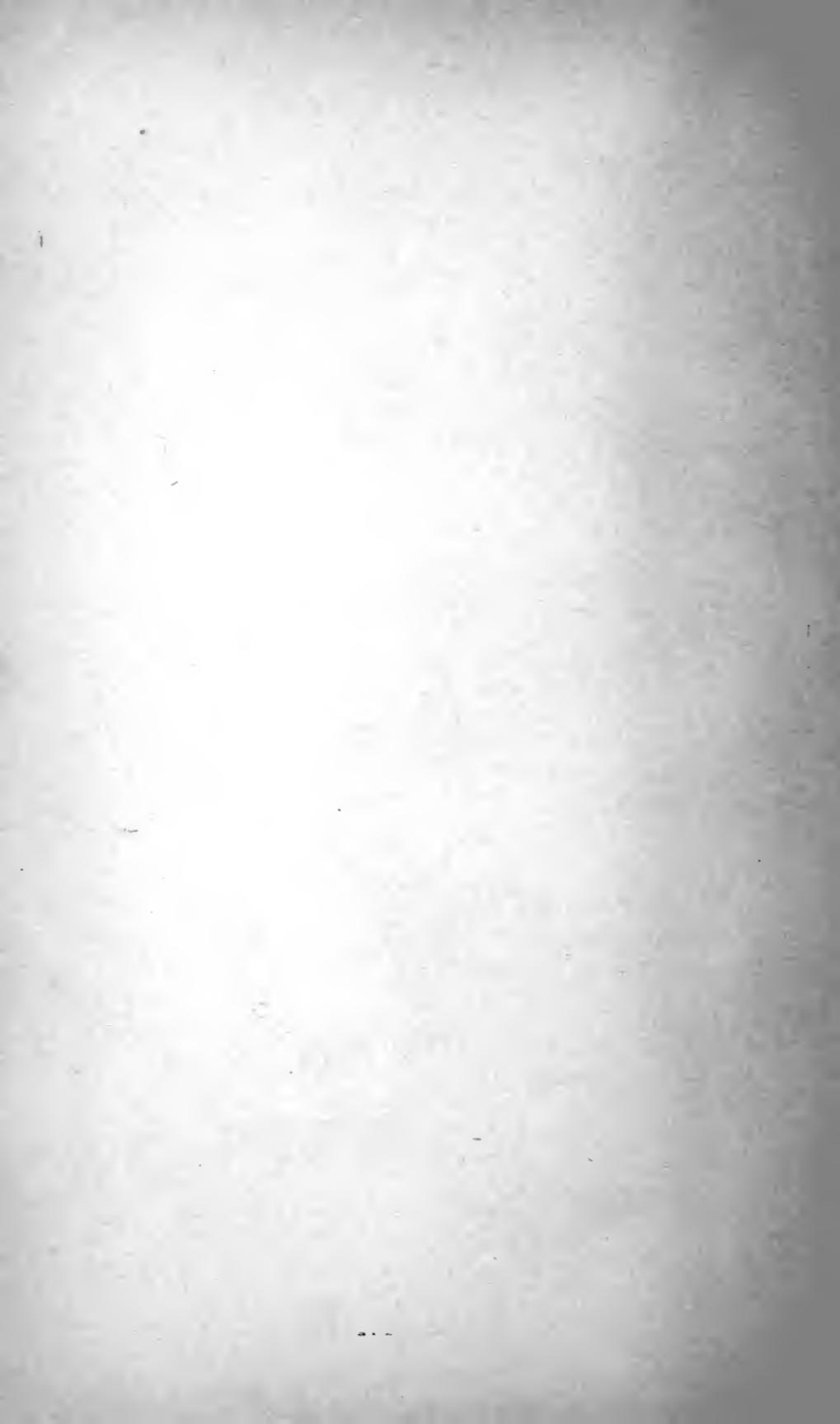
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ABBREVIATIONS.

- Abb.*—Abbott's Circuit Court Reports.
Bald.—Baldwin's Circuit Court Reports.
B. & A.—Banning & Arden's Circuit Court Reports.
Barb.—Barbour's Supreme Court of New York Reports.
Biss.—Bissell's Circuit Court Reports.
Bl.—Black's United States Supreme Court Reports.
H. Bl.—Henry Blackstone's (English) Reports.
Blatch.—Blatchford's Circuit Court Reports.
Bond.—Bond's Circuit Court Reports.
Brock.—Brockenbrough's Circuit Court Reports.
Carp. P. C.—Carpmael's Patent Cases (English).
Clif.—Clifford's Circuit Court Reports.
Com. Dec.—Commissioners Decisions of Patent Office.
Cow.—Cowen's New York Reports.
Curt., C. C.—Curtis Circuit Court Reports.
Dav. P. C.—Davis's Patent Cases (English).
Deady—Deady's Circuit Court Reports.
E. L. & E.—English Law and Equity Reports.
Fed. Rep.—Federal Reporter.
Fish. P. C.—Fisher's Circuit Court Patent Cases.
Fish. P. R.—Fisher's Circuit Court Patent Reports.
Flip.—Flipping's Circuit Court Reports.
Gall.—Gallison's Circuit Court Reports.
Gilp.—Gilpin's Circuit Court Reports.
Grant—Grant's Cases, Penn.
Gray—Gray's Mass. Reports.
Har. & J.—Harris & Johnson's Maryland Reports.
Holmes—Holmes' Circuit Court Reports.
How.—Howard's Circuit Court Reports.
Hughes—Hughes's Circuit Court Reports.
Hun.—Hun's New York Supreme Court Reports.
Ill.—Illinois Reports.
Ind.—Indiana Reports.
John.—Johnson's New York Reports.
McA.—McArthur's District of Columbia Reports.

- McC.*—McCrary's Circuit Court Reports.
McL.—McLean's Circuit Court Reports.
Mason—Mason's Circuit Court Reports.
Maule & S.—Maule & Selwyn's (English) Reports.
Metc.—Metcalf's (Mass.) Reports.
N. Y.—New York Reports.
N. W. Rep.—North Western Reporter.
O. G.—Official Gazette United States Patent Office.
Op.—Opinions of Attorney General.
Otto—Otto United States Supreme Court Reports.
Paine—Paine's Circuit Court Reports.
Penn. L. J.—Pennsylvania Law Journal.
Pet.—Peters's United States Supreme Court Reports.
Pet. C. C.—Peter's Circuit Court Reports
Rawle—Rawle's Penn. Reports.
Robb—Robbs's Circuit Court Reports.
Sawy.—Sawyers's Circuit Court Reports.
S. C.—South Carolina Reports.
Story—Story's Circuit Court Reports.
Thomp. & Cook—Thompson & Cook's N. Y. Supreme Court Reports.
U. S.—United States Reports.
Wall.—Wallace's United States Supreme Court Reports.
Wall., Jr.—Wallace's Circuit Court Reports.
Wash.—Washington's Circuit Court Reports.
Webs. P. C.—Webster's Patent Cases (English).
Wend.—Wendell's New York Reports.
West. L. J.—Western Law Journal.
Wood—Wood's Circuit Court Reports.
W. & M.—Woodbury & Minot's Circuit Court Reports.

INTRODUCTORY.

Mechanical and business experience is acquired at the expense of time and money. For the want of money time must be employed in wage-earning for the necessities of life. Inventors without means do not have this experience, and inventors with means may be wanting "time," the other necessary factor to obtain this experience which must be obtained either from personal efforts or from the experiences of others before success can reasonably be expected.

It is one of the purposes of this work to present a few important facts which the author has learned during his twenty-eight years as inventor, solicitor, manufacturer and operator, that inventors may profit by his experience and not be left to the slow and expensive process of personal discovery—slow and expensive because of experiments which are uncertain in results, both mechanically and financially. Danger points are reached before danger has been suspected; papers are signed, mistakes are made and the fruits of invention lost to many inventors who from their inexperience lose by bad management, or are robbed of merited fortunes, when they resume their former vocations with the not very consoling thought, vehemently aired to friends, that "they never will be caught in such traps again." From that time many of them talk of inventions and patents like men of experience, and are in turn called "smart but unfortunate" by their neighbors, who yet recognize them as being local authority on patents and inventions.

This recognition and prominence make these "unfor-

tunate" inventors the accepted guides for the inventors of their respective localities, and their advice is followed, right or wrong, until other fatal blunders are made and the hopes of other inventors have mingled with their own in the depths of abject despair. True, they steered their friends clear of their own pit-falls, but they "steered" them into others with the same fatal results, and this they are likely to continue to do until the roads of these well-meaning advisers are strewn with many other abandoned wrecks and disappointed hopes.

It is not my purpose to recite numerous instances of mistakes of this nature, nor the many common mistakes in developing, patenting, perfecting, manufacturing, and operating inventions, nor to act as solicitor of patents, nor as a patent lawyer, but to accompany inventors from the dawn of their inventions to introduction and maturity in the hope that they will avoid the numerous pit-falls before them detailed herein.

Mistakes are just as common by persons other than inventors in their dealings and operations with patents and inventions. It is another purpose of this work to present facts and decisions which will enable persons to act intelligently with reference to these important matters so little understood by the general public, and so expensive to learn from personal experiences.

It is safe to assume that no business is so little understood by the people generally as that of patents and inventions, and that no business is transacted in which so little regard is had for the legal status of parties or for the intrinsic value of property; notwithstanding the fact that two-thirds of the material wealth of the United States is due directly and indirectly to these interests.

As a rule a greater degree of caution will be exercised in the purchase of a blooded calf from a responsible neighbor than in the purchase of a patent-right from an

entire stranger involving many times the amount of money.

Publications giving full information with reference to the calf and its pedigree are attainable; but publications giving only partial information with reference to the patent and proceedings thereunder, are attainable, and these publications, like stories "to be continued," are bids for business only, and just enough is intended to be written to accomplish the purpose. The business too, is divided into several sub-divisions, and a person may be an expert in one and a novice in all of the others. One may be a good patent solicitor and know but comparatively little of patent law and nothing of developing inventions or of reducing them to practice or of introducing them to the public. Each branch is a business in itself and the whole must to a degree be understood by a person expecting success in the practical line of developing, patenting, perfecting, manufacturing and operating inventions.

RULES OF PRACTICE AND PATENT LAWS.

The reader is referred to the Rules of Practice in the Patent Office, and to a pamphlet of Patent Laws and Laws relating to the registration of Trade Marks and Labels. A copy of each will be mailed free to any address on application by letter to the Commissioner of Patents, Washington, D.C. In every communication to the Commissioner give your post office address, naming county and state, and if a city give your street and number. I am writing on the assumption that you have these copies from which you will derive necessary and valuable information that would otherwise be copied herein.

INTRINSIC VALUE OF INVENTIONS.

Having made an invention or discovery—which terms have practically the same meaning in patent practice—the first question to be considered by the inventor is, does the invention possess intrinsic value? That is, value as an improvement regardless of a patent.

This problem is very difficult to solve and presents the following questions:

1st. By the use of the invention will time or labor or both be saved; and to what extent?

2d. Are better results obtained, and to what degree?

3d. What will be the cost compared with existing methods?

4th. Will a greater or less degree of skill be required to operate it?

5th. Does it simplify or complicate?

6th. Will it be more or less durable?

7th. Will the average person familiar with the class to which the invention belongs readily comprehend it?

8th. What will be the probable demand, cost and profit?

These questions as a whole must be favorably answered before it will be advisable to proceed to procure a patent. See Patentable Inventions, page 18.

An inventor is well qualified to answer questions 1, 2, 4 and 5, viz.: as to the saving of time and labor; as to results; as to the degree of skill that will be required, and as to its simplicity; for the reason that his knowledge of existing devices and requirements caused him to make the invention which is in the line of his experience derived either from actual practice or from close observation—the twin brother of practice. He has discovered the want and supplied it by his inventive skill and ingenuity, and as a “man is the best judge of his own health” so inventors

ought to be the best judges of the points raised under these four questions as the answers to them do not require either mechanical or business experience.

With reference to questions 3, 6, and 8, viz.: as to comparative cost, as to durability, and as to the "probable demand," many inventors do not possess the mechanical skill, experience and general information necessary to arrive at proper conclusions, and will solicit the advice and opinions of different persons, which, as a rule, will be as conflicting as the evidence in the trial of a "horse" lawsuit.

Persons always willing to please will give favorable opinions; others of a "cranky" order will decide adversely on general principles, and still others will impress you with their profundity, and say just enough not to say anything which is really all they know about it, and as "since man to man is so unjust we scarcely know what man to trust," a few hints will be given to enable an inventor to decide these questions for himself.

Consult persons believed to possess the necessary qualifications and receive their reasons for their conclusions.

A decision without the reasons therefor being given may be correct, but one may not understand from decisions alone. The question is one of cause and effect. The effect may be safe but cannot be fully understood until the cause is explained. If a decision be accepted without a statement of the reasons upon which it is based, action will be founded upon the judgment of another, but if the reasons are known action will be based upon the judgment of the person interested, which is much safer as a rule and more satisfactory.

For example,—you may receive an adverse decision based upon the given reason that certain mechanical devices to be employed will not be durable. You may know of similar devices to produce different results re-

quiring greater service than will be required in your production, which have long been in successful operation. This fact will lead you to the conclusion that this decision is, in fact favorable, for the reason being wrong it necessarily follows that the decision founded upon it is wrong also, and as no other reasons were given, you conclude that no other objections could have been offered.

You will find it advisable and oftentimes necessary to receive an explanation of a reason from which you will be able to determine the real value of the reason and thus have an infallible key to the decision.

With reference to question 7, viz.: "Will the average person familiar with the class to which the invention belongs readily comprehend it?" the correct answer will be learned with some difficulty.

You might exhibit your invention to twelve different men as you accidentally meet them and after hearing what each has to say, strike a general average by dividing the sum of their answers by twelve, and then reduce the quotient to correspond with your own ideas in the matter and call the question settled.

When the invention is reduced to practice the "average man" may be able to operate it if a machine, and if it does not break will invariably endorse it, but he is likely to first learn from his more intelligent neighbors of its new and valuable features, when he will arrogate to himself the credit of having selected it, though it was purely accidental—better not invest too much in the opinions of the "average" man.

DEVELOPMENT OF INVENTIONS.

Inventors as a class are very suspicious and oftentimes are indiscreet by exercising too much care with reference

to secrecy in not employing (when they do not possess) the proper mechanical skill to develop their inventions, that they may learn of their value. The development of an invention may disclose obstacles unforeseen, which cannot be overcome or which are so serious as to cause an abandonment of the invention,—a very timely discovery—or the development may disclose so much value that haste is made in securing a patent which, were it not for the development, never would have been secured because of doubts as to its comparative merits. It can be truthfully said, however, that this is infrequently the case as inventors too often mistake their zeal for their judgment, and see, what no one else can see, “millions in it,” though usually too remote for immediate necessities.

There have been some very prominent exceptions to this rule, however, to the discomfiture and chagrin of many “wise acres,” who, at the expense of advertising themselves as having been stupid, will refer to inventions since proved so valuable and relate the circumstances of their development, and how cheaply they might have acquired certain interests in them. These very exceptional cases always become known as “nothing succeeds like success” and the thousands which constitute the rule are buried without ceremony within the narrow circles of their surroundings.

The mechanic employed to develop your invention may in course of the employment, suggest changes and improvements which may be incorporated in the device or machine, and then claim to be a joint inventor with yourself and one-half owner of the whole. You may concede his claim and unite with him in an application for a patent; and discover after the patent is issued that you are not joint inventors and that the patent is invalid.

This has often been done and many fortunes have been lost thereby. I personally know of one instance of the

kind which resulted in a loss of several million dollars to the real inventor, who is now living, and though in comfortable circumstances, is a disappointed man to say the least.

With reference to this very important matter your attention is called to

SCIENTIFIC AID.

TANEY, J.:

"Neither can the inquiries he made, or the information or advice he received from men of science, in the course of his researches, impair his right to the character of an inventor. No invention can possibly be made, consisting of a combination of different elements of power, without a thorough knowledge of the properties of each of them, and of the mode in which they operate on each other; and it can make no difference in this respect, whether he derives his information from books or from conversation with men skilled in the science. If it were otherwise, no patent in which a combination of different elements is used, could ever be obtained; for no man ever made such an invention without having first obtained this information, unless it was discovered by some fortunate accident. And it is evident that such an invention as the Electro-Magnetic telegraph could never have been brought into action without it; for a very high degree of scientific knowledge and the nicest skill in the mechanic arts are combined in it and were both necessary to bring it into successful operation. And the fact that Morse sought and obtained the necessary information and counsel from the best sources and acted upon it, neither impairs his rights as an inventor nor detracts from his merits."

O'Reilly *v.* Morse, 15 How., 111.

To invalidate a patent on the ground that it was not the patentee's idea, it must appear that the suggestions, if any, made to him would furnish all the information necessary to enable him to construct the invention. Pitts *v.* Hall, 2 Blatch., 229; Ibid., 1 Fish., 446.

See Joint Inventors, page 27; Employer and Employe, page 114.

You may hesitate in the employment of mechanical skill for the development of your invention for fear that the exposure will afford an opportunity for the appropriation of your invention by another, as has often been the case.

As a precautionary measure it is advisable to make a drawing or sketch of your invention and attach to, or write upon it which is preferable, a description of it, and a certificate to be signed by the workman, or by any person examining it, properly dated, certifying that: "The invention described and represented herein was exhibited to me this day by _____, who claims to be the sole and original inventor thereof, and that the same or any invention substantially the same has been heretofore unknown to me."

The subscriber or subscribers will be thus barred from maintaining any claim to the invention. True they may describe it to others who may undertake to appropriate it, but such undertaking will be attended with very little if any hope of success, and the chances of detection are too great to warrant the risk.

CAVEATS.

To further guard against the danger of exposing your invention you might file a Caveat in the Patent Office—see its Rules of Practice, page 7, but it may be a question whether in doing this you do not increase the danger of its being appropriated by persons who "are experts in obtaining information." When such information is fraudulently obtained the invention may be modified to deceive, although substantially the same, and an application for a patent thereon filed in the Patent Office by some convenient friend, of which filing you will under said rules be notified by the Patent Office, when you must within three months file an application for a patent on your invention and meet the fraudulent application pre-

viously filed in "Interference," which is said to be the "Patent Pirate's Retreat."

NOTE.—"An Interference is a proceeding instituted for the purpose of determining the question of priority of invention between two or more parties claiming substantially the same patentable invention." For further particulars see Rules of Practice, page —; Priority of Invention, page —; Equivalents, page —.

It is generally supposed that the secret or confidential Archives of the Patent Office are what the term implies, viz.: secret in fact, and I do not say to the contrary; but unfortunately it is true that inventors of prominence persistently claim that access to these secret Archives has been had by persons other than the proper custodians. In Telephone matters this claim is of common notoriety. It is "human to err," and humanity must be depended upon to guard the secret Archives of the Patent Office where, by law, Caveats must be filed, and humanity must be depended upon in your solicitor to resist alluring temptations to give information with reference to the subject matter of your Caveat within his knowledge, and which can be easily reproduced from copies in his possession.

I wish to emphasize the fact that my suspicions with reference to the competency, honesty and skill of patent solicitors are supported by the Rules of Practice in the Patent Office—see page 3 of Revised Issue of July 13, 1886, from which I copy as follows:

"As the value of patents depends largely upon the careful preparations of the specifications and claims, the assistance of competent counsel will, in most cases, be of advantage to the applicant; but the value of their services will be proportionate to their skill and honesty, and too much care cannot be exercised in their selection. The office cannot assume responsibility for the acts of attorneys, nor can it assist applicants in making selections."

"Intelligence and good moral character" are the only

qualifications required to practice in the Patent Office. These qualifications admit of so many different constructions as to be of little value, and when considered in connection with the inducements to dishonesty with the favorable opportunities and with the uncertainty of detection, it must be presumed by men of affairs that the vocation will be a haven of refuge for incompetency, dishonesty and fraud, at the expense of the innocent inventors of the country, and at the expense of the good name of the legitimate and honorable profession.

NOTE.—As a matter of justice I wish to state that my personal experiences with patent solicitors and patent lawyers have been fortunate indeed, and I shall always feel under obligations to them and each of them for their fidelity, skill and efforts in my interests.

No general rule can safely be laid down as to when a Caveat should be filed, but each case must be decided from all of the circumstances surrounding it. In arriving at a determination when prompt action is necessary it will be well to consider the advisability of making an immediate application for a patent.

This course of action, however, will very seldom be necessary for, as a rule, the fears prompting it will be founded on a too vivid imagination; but should you make an immediate application for a patent you will be unable for want of time to make the researches and examinations herein recommended, pages 30, 32. Therefore it will be advisable for you to make the fullest specifications and broadest claims possible within your knowledge of the state of the art, which specifications and claims may be modified according to the references that you may receive from the Patent Office. See Procuring Patents, page 30; Priority of Invention, page 28; Abandonment, page 24; Public Use, page 25; Specifications and Claims, page 35; Patentable Inventions, page 18; Form, Size, Proportion, page 21, and

STATE OF THE ART.

Assuming that you have decided that "your invention possesses intrinsic value, that is, value as an improvement regardless of a patent," as stated, we will now consider the state of the art; or what is new and what is old in your invention.

The general practice is to employ a solicitor of patents to make a "preliminary examination in the Patent Office" and report to the inventor upon the "patentability of an invention," for which a solicitor's fee of five dollars is usually charged.

It will be a poor solicitor indeed who cannot discover some sort of a claim upon which to base a patent, no matter how many similar devices may be found in the Patent Office. His report, therefore, is quite certain to be favorable as to its "patentability," which is strictly correct and may be made with reasonable safety on general principles without any examination, when the fee of five dollars is all profit, and the inventor, though pleased, is "none the wiser."

These facts may enable you to understand why it is that a patent solicitor can safely advertise "No patent, no pay," or "Fees contingent upon securing a patent," and you may be able to determine before we conclude the safe course to pursue.

It is fair to presume that the solicitor by making a favorable report anticipates the further business of procuring a patent, which his letter accompanying the report will likely disclose and which also may very properly be inferred from the advertisements of some solicitors to "Advise as to patentability free of charge," which, as we have seen, may not require much labor nor talent, and but little is lost if no patent is applied for.

An application usually follows the favorable report, and the solicitor, as he expects, secures the business, with his fees amounting to twenty dollars or more, and the more the better, usually obtained by a plea of "unexpected complications and extra services." To these fees, whatever they may be, is usually added five dollars for drawings which should be prepared with great care, but which are often "jobbed out" at incredibly low prices, say a dollar or a dollar and a half, the solicitor pocketing the surplus.

These fees and perquisites, of course, would be cut off by an unfavorable report, which an inventor with these facts before him will hardly expect and quite likely has never received. The unfavorable "business" comes later on, after fees have been paid and very likely with borrowed money long since due, and borrowed too upon the prestige of the "favorable" report on the "patentability of the invention"; not with reference to the state of the art nor with reference to the probable value and validity of the patent when secured; neither with reference to the machine or device manufactured under the patent infringing existing patents, but with reference solely to the "patentability" of the invention.

The inventor asks for nothing more than this, and he receives all he asks for. After receiving a "favorable" report he procures his patent and proceeds to business, when, if his invention is brought prominently into use he need not be surprised to receive notices of infringements and to learn that his patent is practically worthless; but if his invention "sleeps," as a large majority of inventions do, the worthlessness of the patent may never be discovered. Keep in mind the fact that

"An invention may be patentable and be a direct infringement of a previous patent." *Cleveland v. Towle*, 3 Fish., 525; *Spaulding v. Tucker, Deady*, 649; *Fales v. Wentworth*, 1 Holmes, 96.

Many inventors believe that their interests will be protected by the Patent Office, but such is not the case, as "the Patent Office is responsible to nobody," and can decide only on the matters presented like a court of justice that has nothing to do with the drawing of an indictment, but must decide as to its sufficiency. It is the same with the Patent Office in reference to the specifications and claims in the application for a patent which, like an indictment, may be so loosely and improperly drawn as to be worthless; but unlike an indictment the specifications and claims may be amended by the solicitor so as to just "pull through," and they may be and very frequently are repeatedly amended until finally allowed, when the "patentability of the invention" of course is officially established.

After the patent is issued it cannot be changed except to correct mistakes "through the fault of the Patent Office," and it must be judged as it is and not as it might have been. True, the patent may be re-issued for other reasons, which repeats the time and expense, and is not a very consoling remedy. See Re-issue, page 46; Disclaimer, page 49.

PATENTABLE INVENTIONS.

Before filing a Caveat, or before proceeding to make a preliminary examination in the Patent Office to learn of the state of the art, or before making an application for a patent, and in fact before much if any progress is made in the development of your invention you should positively know that your invention is patentable within the United States Patent Laws and the decisions thereunder, and you should also know in case your invention is patentable, whether you have lost any rights by reason of

its public use, its abandonment, and dedication to the public.

You should also know what inventions may be joined in one patent and of the legal effect of patenting a joint invention by a sole inventor and vice versa.

The answers to the first six of the series of questions on page 8, will enter largely into the consideration of Patentability. If, by the use of an invention a saving of time or labor is obtained; rapidity of operation is accomplished either by the application of an improved motor or by a complete or partial reconstruction of the machine. If the former is the case its Patentability depends upon the novelty and extent of the changes wrought in the machine to adapt it to such motive power; if the latter, such reconstruction in whole or in part indicates that it is patentable. If the machine accomplishes better results it may be due to better workmanship and better materials in the construction of the machine, or the manipulations of a more expert operator, or to the reconstruction of the machine in whole or in part by new and improved devices. The latter instance only is evidence of its patentability. When less skill is required to operate a machine, it is evidence that it is simpler, and if simpler, and both new and useful, its patentability cannot be questioned. Mechanical skill is distinguished by the courts from inventive skill, and a fine discrimination is therefore required in considering "patentability."

With reference to the question raised under this heading, "Patentable Inventions," I call your attention to the following Statute, Rules and Decisions.

"Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof not known or used by others in this country, and not patented or described in any printed publication in this or any foreign country before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his

application, unless the same is proved to have been abandoned, may,
* * * * obtain a patent therefor." Rev. Stat., Sec. 4886.

The courts require in accordance with the requisites of the statutes that an applicant for a patent must himself make the invention, that it required inventive skill as distinguished from mere skilled workmanship, that it was new and useful. *Thompson v. Boisselier*, 114 U. S., 1; *Woodman v. Stimson*, 3 Fish., 98. The act of 1836 seems to require only novelty and utility in an invention, upon which to base a patent. *McCormick v. Seymour*, 2 Blatch., 240.

An invention may be

"A simple but happy conception, which, when reduced to practice, produces surprising results, both in the quality of the article manufactured and the rapidity with which it was turned out. A subject matter to be patentable must require invention, but it is not, necessarily, the result of long and painful study, or embodied alone in complex mechanism. A single flash of thought may reveal to the mind of the inventor the new idea, and a frail and simple contrivance may embody it. Some inventions are the result of long and weary years of study and labor, pursued in the face of abortive experiments and baffled attempts, and finally reached after the severest struggles, while others are the fruit of a single, happy thought." *Magic Ruffle Co. v. Douglas*, 2 Fish., P. C., 330.

There cannot be more than one valid patent for an invention.
* * * * Separate patents for separate and distinct parts of the same invention are nevertheless valid. *Jones v. Sewall*, 3 Cliff., 563.

Separate patents for the machine and the process and the product are allowable. *McKay v. Dibert*, 5 Fed. Rep., 587; *Kelleher v. Darling*, 14 O. G., 673.

A law of nature, i. e., a scientific fact or principle is not patentable. *Walker on Pat.*, p. 7; *In re, Kemper*, 1 MacA., 1.

A result is not patentable. *Fuller v. Ventzer*, 4 Otto, 288.

"Invention," (or that which is patentable,) in the sense of the patent law, is the finding out, contriving, devising or creating something new or useful, which did not exist before, by an operation of the intellect. *Ransom v. Mayor of New York*, P. C., 1 Fish., 252.

The application of an old process or thing to a new subject, without any exercise of the inventive faculty, is not patentable. *Hotchkiss v. Greenwood*, 11 How., 248.

Mere change in the form of machinery (unless a particular form is specified as the means by which the effect described is produced), or an alteration in some of its unessential parts, or in the use of known

equivalent powers, not varying essentially the machine, or its mode of operation or organization, will not make the new machine a new invention. *O'Reilly v. Morse*, 15 How., 62.

A change only in form, proportions or degree, the substitution of equivalents doing substantially the same thing in the same way, by substantially the same means, with better result, is not such an invention as will sustain a patent. *Smith v. Nichols*, 21 Wall, 112.

The selection of a superior material cannot, of itself, be the subject of a patent. *In re, Maynard*, 1 MacA., 536.

Alterations of a combination as is the necessary consequence of the practical use of the machine by a man of ordinary skill and judgment are not patentable. *Wilbur v. Beecher*, 2 Blatch., 132.

See Form, Size, Proportion, page 21; Abandonment, page 24; Public Use, page 25; Procuring Patents, page 30; Specifications and Claims, page 35.

FORM, SIZE, PROPORTION.

A patent cannot be granted merely for a change of form. The Act of Feb. 11, 1793, Sec. 2 (1 Statutes at Large, 321) so declared in express terms, and though this declaratory law was not re-enacted in the Patent Act of 1836 (5 Statutes at Large, 117), it is a principle which necessarily makes part of every system of law granting patents for new inventions. Merely to change the form of a machine is the work of a constructor not of an inventor; such a change cannot be deemed an invention. * * * To change the form of an existing machine, and by means of such change to introduce and employ other mechanical principles or natural powers, or, as it is termed, a new mode of operation, and thus attain a new and useful result, is the subject of a patent. *Winans v. Denmead*, 15 How., 330.

A change of form will not do, inasmuch as a different form might answer all the purposes of the first invention. There are instruments invented in which the particular form is a material part of the discovery, and then a departure from the form would be a substantial departure, because the form is essential to the invention. But there are many manufactures where the particular form of the thing is not essential to its utility, and there may be a departure from that form and still a valuable instrument be constructed. The curved form is given to the plates to allow for the expansion and contraction of the plates in casting a chilled rim, but for the purpose of making allowance for contraction any other form involving the principle of that allowance

may be used, and there would obviously be no substantial change in the thing manufactured, because a particular form given by the first inventor is not essential to the production of the instrument. If the form is a part of the thing patented, and is essential to its value, then a change from the form is a substantial change, and may be the means of producing a new manufacture. Take the Blanchard machine as an illustration: It is one of the most ingenious machines of the day, and is constructed to turn irregular forms after a pattern, such as gun stocks, lasts, and spokes for carriage wheels. Blanchard, in his machine, cuts the block, whether for a last or a gun stock, or a spoke shave, after a pattern, by means of rotating cutters. A modification of this machine was made, and set up as a new machine, and claimed not to be an infringement. Instead of rotating the cutters the cutters were made stationary, and the block rotated. It was claimed that this was an entirely different principle from Blanchard's, and that the party making the change had not violated the patent. Now, any person of common understanding would see that the thing could be done in that way; it was a mere difference in the mechanical contrivance and a change of form, in which there was no skill, and no ingenuity. This illustrates the difference between a change of form and a substantial change involving mind, ingenuity and invention. *Many v. Jagger*, 1 Blatch., 372.

It is not every change of form and principle which is declared (by the statute) to be no discovery, but that which has simply a change of form or proportion, and nothing more. If, by changing the form and proportion a new effect is produced, there is not simply a change of form and proportion, but a change of principle also. In every case, therefore, the question must be submitted to the jury whether the change of form and proportion has produced a different effect. *Davis v. Palmer*, 2 Brock., 198.

We take the rule to be, and so it has been settled in this and in other courts, that, if the two machines be substantially the same, and operate in the same manner, to produce the same result,—though they may differ in form, proportions and utility, they are the same in principle. *Evans v. Eaton*, 3 Wash., 443.

A distinction must be observed between a new article of commerce and a new article which, as such, is patentable. * * * * To render the article new in the sense of the Patent Law, it must be more or less efficacious, or possess new properties by a combination with other ingredients; not from a mere change of form produced by a mechanical division. *Glue Co. v. Upton*, 7 Otto, 3.

DOUBLE USE.

It requires no commentary to establish that the application for an old thing to a new use, without any other invention, is not a patentable contrivance. A man who should use a common coffee mill for the first time to grind peas could hardly maintain a patent for it. A man who should for the first time card wool on a common cotton-carding machine, would find it difficult to establish an exclusive right to the use of it for such a purpose. *Woodman v. Stimpson*, 3 Fish., P. C., 104; *McComb v. Brodie*, 2 O. G., 119.

NOVELTY.

To be new, in the sense of the act, it must be the product of original thought or inventive skill, and not a mere form of mechanical change of what was old and well known. *The Stanley Works v. Sargent & Company*, 8 Blatch., 344.

Whenever a change or device is new, and accomplishes beneficial results, courts look with favor upon it. The law in such cases has no nice standard by which to gauge the degree of mental power or inventive genius brought into play in originating the new device. *The Middleton Coal Co. v. Judd.*, 3 Fish., P. C., 141.

As a patent is *prima facie* evidence of novelty the want of novelty must be proved by the defendant. *Howes v. Nute*, 4 Cliff., 173.

Validity of a patent is not determinable by the degree of novelty of invention displayed, but it is sufficient if there exists some novelty and merit, however slight. *Miller & Peters Manufacturing Co. v. Du Brul*, 12 O. G., 351.

UTILITY.

“Useful,” means, not frivolous or injurious to the well-being, good policy or sound morals of society. *Lowell v. Lewis*, 1 Mason, 182.

If inventions are not entirely useless, the requirements of the law in this particular (utility) are complied with. *Stanley v. Hewitt*, 17 Frank. Jr. (2d series), 165; *Conover v. Roach*, 4 Fish., P. C., 12; *Gibbs v. Hoefner*, 19 Fed. Rep., 323.

The patent itself affords *prima facie* evidence of utility. *Vance v. Campbell*, 1 Fish., P. C., 483; *Wayne v. Holmes*, 1 Bond, 27.

General and extensive use of an invention is evidence of its utility. *Adams v. Edwards*, 1 Fish., P. C., 1.

When the defendant has used the invention he is estopped from denying its utility. *Ibid. (Fish)*, *Hays v. Sulson*, 1 Bond, 279.

Price paid for the use of a thing is some evidence of utility. *Hays v. Sulson*, 1 Bond, 279.

Burden of proof is on the defendant to show that a patented invention wants utility. *Fifield v. Whittemore*, 17 Fed. Rep., 513.

ABANDONMENT.

Abandonment is the surrendering of an invention to the public, by reason of the failure of an inventor to make application within a reasonable time after he has made known, by publication or written description, or has publicly used his invention, or by his failure to prosecute a pending application for a patent. Abandonment is affected by the intent of an inventor. The law does not presume that an inventor assented to the use of his invention by others. *McMillen v. Barclay*, 5 Fish., P. C., 189. There must be evidence of a distinct character showing such intent. *Hovey v. Henry*, 3 West, L. J., 153. Intention of abandonment need not necessarily be expressed in words. *Kendall v. Winsor*, 21 How., 322; *Planing Machine Co. v. Keith*, 11 Otto., 479; *Shaw v. Cooper*, 7 Pet., 292. Circumstances may arise which will excuse delay in prosecuting an application for a patent, such as extreme poverty or protracted sickness. *Ibid. (Planing Machine Co. v. Keith.)*

If the originator of an imperfect device makes no effort for years to perfect it and in the meantime others mature it independently of him and obtained patents for it, he loses all right to a patent. *Gray v. Hale*, Com. Dec. (1871), 129.

The doctrine of the law is, that if an invention was used by others or even by one person, with the consent or the allowance of the inventor, publicly, and for more than two years before the application for a patent; or if it was used for a long period by the inventor himself, not in the way of experiment, but for gain, in either case the patent is void. *Bell v. Daniels*, 1 Bond, 212.

The mere forbearance to apply for a patent during the progress of experiments, and until the party has perfected his invention and tested its value by actual practice, affords no just grounds for presuming an abandonment. It is true an express relinquishment of an

invention to the public is not indispensable to an abandonment, which may be inferred from long delays unexplained, or from acts of the inventor inconsistent with any other theory, but it cannot be presumed from mere delay to apply for a patent when the inventor is all the while perfecting the invention and testing its merits. *The Locomotive Engine Safety-Truck Co. v. The Penn. R. Co.*, 6 O. G., 927.

Sales in the usual course of business, whether absolute or conditional, if they are sales of the patented thing, work a forfeiture. A single sale has that effect, as well as a hundred sales. *Henry v. Francetown Soap-Stone Co.*, 2 Fed. Rep., 78.

Where a patented machine was improved, and the inventor of the improvement could not use his improvement without infringing the original patent, and was unsuccessful in his efforts to get the owners thereof to adopt his improvement, or in inducing others to operate it, and the inventor was unable for want of means to operate his invention or to apply for a patent thereon until another person had made and patented his improvement, it was decided that he had not lost his right in his invention. *Webster v. New Brunswick Carpet Co.*, 5 O. G., 522.

If the public use of an invention prior to the application for a patent thereon is acquiesced in by the inventor, it is an abandonment of his invention. His acquiescence can in no case be presumed, where he has no knowledge of such use. But this knowledge may be presumed from the circumstances of the case. *Shaw v. Cooper*, 7 Pet., 292.

To defeat a patent by a dedication to the public, the public use must be of a perfected machine and not of a machine for experiment only. *Winans v. New York & Harlem R. R.*, 4 Fish., P. C., 1.

See Priority of Inventions, page 28; Defeating Patents, page 43, and

PUBLIC USE.

The U. S. Statute of 1870 requires that an invention to be patentable must not have been "in public use or on sale for more than two years prior to his (the inventor's) application for a patent therefor."

Public use means the use in public with the consent of the inventor. *Rich v. Lippincott*, 2 Fish., P. C., 1. And a single use by any person other than the inventor, or by the inventor in an open way if the use was not experimental, is a public use within the patent law. *Jones v. Barker*, 11 Fed. Rep., 597.

After the filing of an original application for a patent if such application has not been abandoned and two petitions therein relate to the

"same transaction," the public use to invalidate the patent must be a use prior to the original and continuing application. *Weston v. White*, 13 Blatch., 447.

If an inventor sells a machine of which his invention forms a part and allows it to be used without restriction of any kind the use is a public one. So, on the other hand, a use necessarily open to public view, if made in good faith solely to test the qualities of the invention and for the purpose of experiment, is not a public use within the meaning of the statute. *Egbert v. Lippmann*, 14 Otto, 333; *Elizabeth v. Pavement Co.*, 97 U. S., 126.

If before an application for a patent an invention should be used surreptitiously in fraud of the inventor, or used without the consent of the inventor, neither such knowledge nor such use will invalidate the patent. *Pennock v. Dialogue*, 2 Pet., 1.

If an inventor suffers his invention to go into public use and does not immediately assert his right he is not entitled to a patent; nor will a patent which has been obtained under such circumstances, whatever may have been the intention of the inventor, protect his right. *Shaw v. Cooper*, 7 Pet., 292.

If it were necessary, as well it might be, for the inventor to employ others to assist him in the original structure or use by himself, or if before his application his invention should be pirated by another or used without his consent, it cannot be supposed that such would invalidate the patent. *Pennock v. Dialogue*, 2 Pet., 18.

The patentee may make experiments with his invention or disclose it to those he may wish to consult or employ others to assist him in making and using his machine, and in preparations for procuring a patent, without impairing his patent. *Whitney v. Emmett*, 1 Baldwin, 309.

There is no presumption of law that a patentee consents to the use of his invention by others from the fact that he (the patentee) used it publicly before applying for a patent. *McMillin v. Barclay*, 5 Fish., P. C., 189.

The public use must be (in order to invalidate a patent), of a machine so far perfected as to be practical in its operation so far as it covers the new devices. *American Hide & Leather Splitting Co. v. Tool & Machine Co.*, 1 Holmes, 503.

A mere occasional use by the inventor, in trying experiments, or a temporary use by a few neighbors with his consent, as an act of personal accommodation or kindness, for a short and limited period, will not destroy his right to a patent. *Wyeth v. Stone*, 1 Story, 273.

The evidence should be quite clear that the use was not by the way of experiment, or for the purpose of perfecting the machine, in order to justify the conclusion that the patentee had forfeited his right to the improvement. *Pitts v. Hall*, 1 Fish., P. R., 441.

The plaintiff, therefore, in this case, had a right to use his cars on the Baltimore and Ohio Railroad, by way of trial and experiment and to enter into stipulations with the directors of the road for this purpose without any forfeiture of his rights. * * * It is the use of the improvement after it had been completed and reduced to practical success, which operates as a forfeiture—as a dedication to the public—as a giving it up to the public. *Winans v. New York & Harlem Railroad*, 4 Fish., P. C., 1.

To support a defense of prior public use it must be shown that the use was by some person who perceived the fact of the utility of the machine or process and who understood the results accomplished and it must also be shown that the person so seeing and understanding communicated to the public the information. *Boyd v. Cherry*, 4 McC., 70.

A court must be convinced beyond a reasonable doubt by evidence before it will invalidate a patent because of prior use. *Everest v. Buffalo Lubricating Oil Co.*, 20 Fed. Rep., 848.

An inventor cannot relieve himself of the consequences of the prior public use by assigning an interest in his patent or invention to the party who used it. *Worley v. Loker Tobacco Co.*, 14 Otto, 340.

See Abandonment, page 24; Defeating Patents, page 43.

JOINT INVENTORS.

Where one person suggests one thing and the other another, and by their joint labors a perfect machine is made, a joint patent may properly issue to them. *Worden v. Fish.*, 11 Fed. Rep., 505. If one person invents a distinct part of a machine and another person invents another distinct part of the same machine, such parties are not joint inventors, but should each obtain a patent for his own invention. *Ibid.*, 27.

A joint inventor cannot take a patent in his own name. By the sixth section of the Act of 1836, the applicant must be the inventor. One of several joint inventors cannot, with propriety, be called the inventor; and if he applies for a patent, the Commissioner is bound to refuse it, although that is not expressly named in the seventh sec-

tion as one of the grounds upon which he is authorized to refuse a patent. *Arnold v. Bishop*, 1 *McA.*, 36.

A person reducing to practice the theory of another, who assists in its reduction to practice, cannot be considered as the sole inventor of the machine, as the invention consists both of the discovery of the principle and the reduction of it to practice; in such case neither party can be considered as being the sole inventor. *Ibid.*

A patent to two as joint inventors, which is the sole invention of one alone is void. *Ransom v. Mayor of New York*, 1 *Fish.*, P. C., 252. But a new application may be seasonably filed for a patent on the same invention by the sole inventor. But the latter patent will not retroact by way of confirmation of the patent originally issued. *Deven's Opinion*, 16 *Op.*, 117.

A joint patent cannot be sustained upon a sole invention of either of the patentees. If each of the patentees obtain separate patents for the same invention, and afterwards both obtain a joint patent for the same as their joint invention, they are estopped by the joint pattern in asserting any title under any of the several patents. *Barrett v. Hall*, 1 *Mason*, 447.

When the patent is joint it is *prima facie* evidence of joint invention; but if all the patentees did not join in the invention it is void. *Hotchkiss v. Greenwood*, 4 *McL.*, 456; *Walker on Patents*, sections 50, 51.

There is no statutory authority to grant a patent to a non-inventor jointly with an inventor, without an assignment or a death, any more than there is to grant a patent to a non-inventor alone. *Ibid.* (*Walker*), Sec. 51.

An inventor may adopt minor improvements which are suggested by another, and the person making the suggestion does not thereby become a joint inventor. *Yost v. Heston Com.*, Dec. (1871), 226. These suggestions, to amount to an invention, must furnish all of the information necessary to complete the machine. *Pitts v. Hall*, 2 *Blatch.*, 230. See *Scientific Aid*, page 12.

PRIORITY OF INVENTION.

You will find it impossible to guard against claims made to prior inventions like your own, in advance; hence you will necessarily incur a risk with reference to

them. This question is the most frequently raised in Interference Cases, page 14. To defeat your claim for a patent it seems that it is not necessary for it to be shown that a prior invention like your own had been reduced to practice as will be the case in defeating your patent when obtained. See Defeating Patents, page 43. Neither is it necessary to show that the invention had been in public use, or had been reduced to practical operation; but it seems it must be shown that it was an invention prior to yours as to date, and that the inventor had exercised reasonable and continuous diligence in reducing it to practice.

In a race of diligence between two independent inventors, he who first reduced his invention to a fixed, positive and practical form would seem to be entitled to priority of right to a patent therefor. The clause * * * * now under consideration seems to qualify that right, by providing that, in such cases, he who invents first shall have the prior right, if he is using reasonable diligence in adapting and perfecting the same, although the second inventor, has in fact, first perfected the same, and reduced the same to practice in a positive form. *Woodcock v. Parker*, 1 Gal., 437; 1st Story, 590.

The date of the invention is the date of the discovery involved, and the attempt to embody that in some machine; not the date of perfecting the instrument, * * * * if the invention was made—if it was set forth in a machine which would and did discharge a fire, —that is all which is necessary to constitute the invention. *Colt v. Massachusetts Arms Company*, 1 Fish., P. C., 108.

If, gentlemen (Judge Sprague to the jury), the invention was perfected—if Mr. Johnson used reasonable diligence to perfect it, then he had a right to have it incorporated into his patent, and to supersede those who had intervened between his first invention or discovery and his subsequent taking out of his patent. If he had not perfected it, and did not use due diligence to carry it into effect, and in the meantime, before he got his patent, somebody else had invented and used, and incorporated into a useful, practical machine, that mode of feeding, then he could not by subsequent patent appropriate to himself what was embraced in the former machine. *Johnson v. Root*, 1 Fish., P. C., 351.

There can be no comparison of the diligence of the two inventors

to determine the fact of diligence, and it is of no consequence that the second inventor was exceedingly diligent and made more rapid progress, if the first inventor was reasonably diligent in perfecting the invention. *Electric R. R. Signal Co. v. Hall R. R. Signal Co.*, 6 Fed. Rep., 603.

The question is not whether one party obtained better results than the other, in an issue of priority of invention, but the question is which of the parties first made the subject matter in controversy. *Matthews v. Wade*, 1 MacA., 143.

See Defeating Patents, page 43.

PROCURING PATENTS.

Employ a solicitor of patents to make a preliminary examination in the Patent Office, not with reference to the "patentability of your invention," but for the purpose of forwarding you the dates and numbers of all patents for inventions similar to your own. At the time of the employment you should furnish your solicitor with a drawing or sketch of your invention in addition to a full and clear written description of its construction and operation. Specifically point out its advantages and wherein it differs from similar devices and machines in use. If you have not access to Patent Office Reports, nor to publications containing the claims and drawings of the patents of which you received the dates and numbers from your solicitor, write direct to the Commissioner of Patents for official copies of them (giving their dates and numbers), to be mailed to your address. Upon the receipt of these copies and their examination by yourself, select one, two or more of them, as your judgment may dictate, which appear to be the most similar to your invention, and write again to the Commissioner of Patents for copies of all of the rejected claims and references appearing in the files of these cases in the Patent Office previous to the granting of these patents, which you

must designate by dates and numbers in your letter to the Commissioner.

You will likely find many rejected claims and references in this manner, and if you find references to patents from which you have not received dates and numbers from your solicitor, and you have not access to Patent Office Reports, nor to publications containing copies of these patents, write to the Commissioner of Patents for official copies of them also, to be sent to your address. You may thus find that these patents have been overlooked by your solicitor, however honest he may have been. This mode of procedure may lead you to discover that the state of the art is more advanced than you had anticipated and that you have very little, if anything, that you can claim as being new except in remote combinations. You will likely decide in favor of the "patentability" of your invention; but it may be by such a narrow margin as to make the patent practically worthless except for "red tape," or you may decide that some if not all of the references do not meet your case and that the gist of your invention is new, if not the whole of it. Certain it is that with a full knowledge of your invention, and with these copies and papers before you, combined with your reasons for desiring a patent, you are the most competent person to decide as to whether you had better stop where you are or proceed to obtain a patent. Your expense has been small compared with the information you have received—say from ten to twenty dollars—and your action can be based upon intelligence so necessary to your success. See office fees in Rules of Practice, page 7.

The law charges a patentee with a knowledge of all prior patents in the line of his invention. *Odiorne v. Winkley*, 2 Gall., 50. Therefore it is that evidence may be given without notice in relation to the state of the art. *Vance v. Campbell*, 1 Black., 427.

After these researches if you procure a weak patent, it will not be because you expect it will be strong. You will not be groping in the dark and awaken to daylight by learning of the repeated rejections of your claims, followed by as many modifications of them by your solicitor until perhaps they consist wholly of modifications made to avoid these references, and this, too, after your application for a patent has been filed in the Patent Office, and an expense of from forty to fifty dollars or more has been incurred.

I am assuming that your solicitor will keep you advised as to the different references, rejections, modifications and eliminations which occur during the prosecution of your application. This, however, he may inadvertently fail to do, and more especially if he had solicited business by advertising "no patent, no pay, etc." If you are not thus advised you will not "awaken to daylight" until you receive your patent, and not then as a rule, unless you have had experience by which your attention is called to the claims. The probability is that your "awakening" will take place after you have expended much time and money and your credit, perhaps, in placing your invention upon the market, by finding your patent useless to prevent infringements, or your business stopped by injunctions on account of infringements, or by other legal proceedings against you, based upon prior patents.

You have now learned the State of the Art, see page 16, and you have formed definite opinions with reference to what you are justly entitled. Take the patents of which you have received copies in the order of their dates and write clearly and succinctly your opinions with reference to them in their relations to your invention. Set forth fully the reasons for your opinion and send to your patent solicitor your opinions and reasons, with a request that he

proceed to prepare your application for a patent. He will then prepare the specifications, claims, etc., and forward for your signature. These application papers you should carefully examine before signing, and not sign unless you are satisfied with them; but after copying for your future reference, return them with your suggestions to your solicitor, who may adopt your suggestions in whole or in part and incorporate them in new specifications and claims, or he may return the papers for your signature without any changes and give very satisfactory reasons therefor. Few inventors are acquainted with the full scope and meaning of words and terms which custom at least, has made it not only proper, but necessary to be employed in practice in the Patent Office. Again, many things are implied, and therefore are not expressed, which are liable to mislead a person not familiar with the practice; but there is nothing so mysterious as to prevent a good conscientious patent solicitor, and many there are, from making such explanations to his client as to fully acquaint him with his own case. Such a solicitor appreciates an intelligent client, receives his suggestions cheerfully and gives them due consideration.

A personal interview with your solicitor you will have observed is not necessary, but in complicated cases it is often advisable, and should be had soon after he receives your notes and comments concerning the references and before he prepares the specifications and claims; nothing can be gained by an earlier interview.

It may be useless to add, but my own experience induces me to state that an inventor had better not undertake to be his own solicitor, as he will learn to his great disadvantage that he has a "fool for a client" very difficult to discard, whose solicitor will be occupying the most of his time in the hopeless task of correcting his own mistakes.

With the facts, statutes, rules and decisions now before you and the invention itself; combined with the thorough knowledge of its scope and practical operation you will be able to definitely decide in advance all of the material questions necessary to be decided with reference to the patenting of your invention. It will doubtless be useless for you to consult with any persons in relation to it, as you likely will so value your own fixed opinions founded upon the law and the facts as to cast aside the conflicting opinions of others, however much you may respect the authors of them. See references under specifications and claims, and

JOINDER OF INVENTIONS.

A patent may embrace both a combination consisting of several elements, which together compose an organized machine, and sub-combinations consisting of fewer members of the same elements. *Stevens v. Pritchard*, 4 Cliff., 417. It is doubted, however, whether under the general patent law, improvements of different machines could regularly be comprehended in the same patent, *Evans v. Eaton*, 3 Wheat., 454, but undoubtedly distinct improvements in two different machines having distinct and independent operations cannot be joined in one patent. *Moody v. Fiske*, 2 Mason, 112.

If inventions are connected in their design and operation they may be combined in one patent. *Hogg v. Emerson*, 11 How., 587. So, too, distinct improvements in one machine may be united in one patent, and an action lies for a piracy of any of the improvements although the defendants have not used the whole of the improvements. *Moody v. Fiske*, 2 Mason, 112. And inventions appropriate for use in the same thing connected together for the common purpose of making it, can be joined in one patent. *Maxheimer v. Meyer*, 9 Fed. Rep., 460.

There can be no objection to subdividing an invention into distinct claims as the courts have held divisional patents valid. *Brown v. Deere, Mansur & Co.*, 2 McC., 422. But it is a matter of some discretion with the Patent Office as to whether two or more inventions should be joined in one patent. *Bennett v. Fowler*, 8 Wall., 445.

If the process and product are included in one patent as they may be, the fact should be disclosed in the specifications and claims, that the inventor had both of these results in his mind. *Welling v. Rubber Harness Trimming Co.*, 7 O. G., 608.

A claim for the process of using a machine and a claim for the machine itself, cannot be made in the same patent. *Gage v. Kellogg*, 23 Fed. Rep., 891.

As an article of manufacture a product cannot properly be embraced in the same claim with the process. (*Merrill v. Yeomans*, 1 Holmes, 331.) It seems that the process is not patentable, and it is doubtful whether claims to the process and to the instrumentalities of the process make two subjects of patents. *United States ex rel. Gorton v. Butterworth*, 27 O. G., 717.

A single patent may be taken for several improvements on one and the same machine, or for two machines, which are invented by the patentee, and conduce to the same common purpose and object, although they are each capable of a distinct use and application, without being united together. But a single patent cannot be taken for two distinct machines, not conduced to the same common purpose or object, but designed for totally different and independent objects. *Wyeth v. Stone*, 1 Story, 273.

The principle seems to be that inventions to be joined in one patent should be capable of being used, not only in connection but to attain a common end; but their actual employment together in practice does not seem to be required to sustain the validity of the patent wherein they are united, and the wrongful use of either of the separate machines is a violation of the patent right, *pro tanto*. *Emerson v. Hogg*, 2 Blatch., 1.

See Double Use, page 23; Combinations, page 37; Equivalents, page 40.

SPECIFICATIONS AND CLAIMS.

For Specifications in Rules of Practice, see page 7.

The word "Specification," when used without the word "Claim," means description and claim. * * * The word "Specification" was used in Sec. 13 of the Patent Act of July 4, 1836 (5 U. S. Statutes at Large, 122), in a different sense from that in which it is used in Sec. 53 of the Act of July 8, 1870 (16 Ibid., 205), and in Sec. 4916 of the Revised Statutes, taken from Sec. 53. * * * * In Sec. 26 of

the Act of 1870, the word "Specify" is omitted and the words "Specification and Claim" are used, applying the word "Specification" in that connection to the description alone. This state of things continues in Sec. 4888 of the Revised Statutes. * * * * The word "description" is omitted in Sec. 53 of the Act of 1870, and in Sec. 4916 of the Revised Statutes, and the word "Specification" alone is preserved, meaning, when used without the word "Claim," the description and the claim. *Wilson v. Coon*, 18 Blatch., 532.

Specifications are to be construed liberally, in accordance with the design of the Constitution and the Patent Laws of the United States, to promote the progress of useful arts, and allow inventors to retain to their own use, not anything which is matter of common right, but what they themselves have created. (*Ames v. Howard*, 1 Sumn., 482; *Neilson v. Hartford, Webb.*, P. C., 341;) *Winans v. Denmead*, 15 How., 330.

The two principal purposes of the specifications of a patent are, to enable the public to know of what the patentee claims to be the inventor, and to enable the public to practice the invention when the patent has expired. The patentee, in his specification, does not address himself to the uninformed but to persons of skill in the art to which the invention appertains, and he is only required to use such full, clear, and exact terms in his description as will enable persons of this class to produce the thing he describes. *Forbes v. Barstow*, 2 Cliff., 379.

Drawings which form part of the specification cannot be resorted to for the purpose of adding to, or in any manner enlarging the claim. *Hogg et al. v. Emerson*, 11 How., 587.

It is often the misfortune of inventors to have their specifications drawn with very imperfect skill, but courts of law exercise great liberality in giving construction to these instruments. It may well be doubted whether their indulgence has not gone too far in this direction, and their efforts to save the rights of inventors * * * * been perverted into an assumed license to indulge in loose descriptions. *Middleton Tool Co. v. Judd, et al.*, 3 Fish., P. C., 141.

The claim is the attempt on the part of the inventor to describe the very thing which he supposes he has invented and for which he asks a patent, *Many v. Jagger*, 1 Blatch., 372; it must be for something described in the specifications, so that any person of ordinary skill, or skill in the art covered by the patent, can make a mechanism which would contain the claim, *Vogler v. Semple*, 7 Biss., 382; and what an inventor does not claim he must be presumed to have abandoned. *Conklin and Stafford*, 5 O. G., 235; *Evarts v. Ford*, 5 O. G., 58.

An alternative claim to only one or the other of two things, but to neither positively is void; but a claim to each of two things, whichever is used, is valid. *Union Paper Bag Co. v. Nixon*, 4 O. G., 31.

Where the inventor has discovered a new art, he has a right to the broadest claim which can be made in the case, not to the abstract right to the art without regard to the means, but to all means and processes which he has both invented and claimed. *Amer. Bell Tel. Co. v. Spencer*, 8 Fed. Rep., 509, and his claims should be construed broadly if first to enter a field of invention. *Worswick Manufacturing Co. v. City of Buffalo*, 20 Fed. Rep., 126; but a claim for a device or machine which is not the first of its kind in the field, that is broad enough to include all previous or future inventions for the same purpose, is invalid. *Window Screen Co. v. Boughton*, 1 B. & A., 327.

A claim must be either for the structure, the combination of devices or the method of operation. *Mathews v. Schoneberger*, 18 Blatch., 357.

A claim is binding on the patentee as a limitation to the thing patented. *Smith v. Elliott*, 9 Blatch., 400; *Dennis v. Cross*, 3 Biss., 389; *Howe v. Williams*, 2 Cliff., 245.

A patentee cannot go beyond his claims and insist that his patent covers something not claimed, simply because it was described in his specifications. *Lehigh Valley R. Co. v. Mellon*, 104 U. S., 112.

Inventors in drawing their specifications and claims have the right to assume a knowledge of the preceding state of the art in relation to them on the part of those desiring to understand them. *Tompkins v. Gage*, 5 Blatch., 268. See *Procuring Patents*, pages 30; *Intrinsic Value of Inventions*, page 8; *Development of Inventions*, page 10; *State of the Art*, page 16; *Scientific Aid*, page 12; *Priority of Invention*, page 28; *Patentable Inventions*, page 18; *Abandonment*, page 24; *Public Use*, page 25; *Joinder of Inventions*, page 34; *Joint Inventors*, page 27; *Equivalents*, page 40; *Substantially, etc.*, page 39; *Construction of Claims*, page 41; *Double Use*, page 23; *Identity*, page 102; *Defeating Patents*, page 43; *Re-issues*, page 46; *Infringements*, page 100; *Form, Size, Proportion*, page 21, and

COMBINATIONS.

There are two classes or kinds of combinations recognized by our Patent Laws, which are properly the subject of a patent. The first may be defined to be one in which all the parts were before known, and where the sole merit of the invention consists in such an arrange-

ment of them as to produce a new and useful result, or where, by adopting parts of a machine which may have been known for ages, an inventor has succeeded in making such an arrangement of them as that they produce a result never before obtained, and have, in that point of view, a merit of originality, and are, therefore, patentable. There is another class of combinations, where some of the parts or elements of the combination are new, and their invention claimed, but where they are using a combination with parts or elements that were known before.

It is well settled that a patent may be obtained for the first class of combinations, but it is a principle well recognized that there is no infringement unless the party has used all the elements. If the combination consists of A, B, C, three mechanical structures long known, and if the party sued has only the parts B, C, and not A, he is not regarded as an infringer; he must use all to subject himself to liability. If the combination have the other character to which I (the Court) referred, being, to a certain extent, new, but embracing some old parts or elements, then there is an infringement by the use of that part which is new and the invention of the patentee. *Lee v. Blandy*, 1 Bond, 361.

All of the component parts must so enter into a combination of old elements that each qualifies every other. The result must be the product of the combination, which is patentable provided something new and useful is produced. If the elements of the combination act independently of each other, or if one element acts independently of the others, it is an aggregation of parts, and not entitled to protection as a combination. It is indispensable that a new and useful result should be produced, either by the invention of a new thing or a new combination of old things. Unless this is the case, even though the elements act reciprocally and in combination, the requirements of the law are not satisfied. The combination must be new, so must the result. (*Clark Pomace Holder Co. v. Ferguson*, 17 Fed. Rep., 79; *Hailes v. VanWormer*, 20 Wall., 353; *Pickering v. McCullough*, 104 U. S., 310; *Reckendorfer v. Faber*, 92 U. S., 347; *Packing Co. Cases*, 105 U. S., 566; *Perry v. Co-Operative Co.*, 12 Fed. Rep., 436; *Welling v. Crane*, 14 Fed. Rep., 571; *Slawson v. Railroad Co.*, 4 Fed. Rep., 531; *Stevenson v. Railroad Co.*, 4 Fed. Rep., 457; *Manuf'g Co. v. Myers*, 23 O. G., 1443; same case, 15 Fed. Rep., 237.) *Doubleday v. Roess*, 11 Fed. Rep., 737.

A mere aggregation of parts, whereof the patentee has not the exclusive right to either, and in which the parts have no new operation and produce no result which is due to the combination itself, is

not patentable (*Hailes v. VanWormer*, 7 Blatch., 443), and see an analogous principle in cases which held that the mere appropriation of an old device to a new use is not patentable (*Stimpson v. Woodman*, 10 Wall., 117; the cases collected in *Curtis on Patents*, Sec. 33 and note; *Bean v. Smallwood*, 2 Story, 408; *Winans v. R. R. Co.*, *Ibid.*, 412; *Hotchkiss v. Greenwood*, 11 How., 248). * * * * The patent is itself *prima facie* evidence that the combination was new. *Sarven v. Hall*, 9 Blatch., 524.

If the change is not important; if it merely makes the machine work a little truer, but that degree of trueness is of no essential importance, then certainly you cannot say that the combination is different. If it is of essential importance, then you can say that the combination is different. *Woodman v. Stimpson*, 3 Fish., P. R., 98.

The patentee of a machine by which an article is fabricated, may distribute the several mechanisms embodied in it into groups, each embracing such as co-operate in producing a definite effect upon the material, and may have a distinct claim for each group or combination, although no one of them is capable of any commercially useful result by itself, and the conjoined operation of every one, or an equivalent, is necessary to accomplish the object. A patent may be so framed, on this plan, as to obviate the danger of its being evaded by omitting parts of the combined machine when that is claimed. *Wells v. Jaques*, 5 O. G., 364.

A claim for a combination of elements does not cover those elements separately. *Evans v. Eaton*, 1 Pet., C. C., 322.

See Specifications and Claims, page 35; Infringements, page 93; Equivalents, page 40; Joinder of Inventions, page 34; Double Use, page 23; Identity, page 102; and

SUBSTANTIALLY,—MEANING OF.

The words "substantially as set forth in the above specification" have an important qualification of the broad language of the claim—one that limits and defines it by reference to the description that has gone before. *Detmold v. Reeves*, 1 Fish., P. C., 127.

Effect must be given to the words "substantially as described" which are used in the claim, and their effect is to refer to the specification for the description of the elements of the combination which is wanting in the claim. *Knox v. Murphy*, 9 Blatch., 205.

The last clause of the * * * claim "substantially as, and for the purpose set forth" throws us back to the specification for a

qualification of the claim, and the several elements of which the combination is composed. The Corn-Planter Patent, 23 Wall., 181.

To determine whether the machines are substantially alike or substantially different, the jury is called upon to perform only a common duty. We look more to the substance of things than to their forms. Stansbury *v.* Taggart, 3 McL., 432.

The words "substantially as specified" mean "substantially as specified" in regard to the combination which is the subject of the claim. Lake Shore, etc. *v.* Car Brake Shoe Co., 110 U. S., 229.

The words "constructed substantially as above described," in the claim, must (in this case), in view of the whole specification, have a broader interpretation. The Gorham Mfg. Co. *v.* White, 7 Blatch., 513.

The words "substantially as described" must necessarily be implied if not expressed; and being so employed, they involve a reference to the specification. Westinghouse Jr. *v.* Gardner & Ransom Brake Co., 2 B. & A., 55; Matthews *v.* Schoneberger, 4 Fed. Rep., 635.

See Construction of Claims, page 41; Defeating Patents, page 43; Specifications and Claims, page 35; Infringements, page 93, and

EQUIVALENTS.

The term "Equivalent," as used in patent cases, has two meanings. The one relates to the results that are produced, and the other to the mechanism by which those results are produced. A mechanical equivalent, as generally understood, is when one thing may be adopted instead of another, by a person skilled in the art, from his knowledge of the art. Johnson *v.* Root, 1 Fish., P. C., 351.

Mere colorable alterations, or adroit evasions, by substituting one mechanical equivalent for another in the combination which constitutes the machine, should never be allowed to protect a party. Foss *v.* Herbert, 1 Biss., 121.

There are many devices in construction that can be made by a skillful mechanic, differing very much from each other in appearance, but which, in the eye of the patent law, are identical. For instance, an inventor, in the construction of his machine, desires a given power, in order to give practical operation and effect to his discovery. One mechanic may furnish the power by means of a lever, another by means of a screw—two very different instruments—yet, so far as the use of the instruments and so far as their purpose to furnish the

power is concerned, they are regarded simply as mechanical equivalents, and the use of one in one machine does not distinguish that machine from a machine in which the other is found. So, too, a given power may be obtained by a spring or by a weight, or by a pulley—apparently very different devices. Yet, as they are used for the same purpose, and to accomplish the same end in machinery, they are regarded as substantially identical. *Tatham v. LeRoy*, 2 Blatch., 474.

The words "or the equivalent therefor" in a claim cannot be construed to extent to any improvements which are not substantially the same as those described, and which do not involve the same principle. The words embrace all alterations which are merely colorable. Such "colorable" alterations in a machine afford no ground for a patent. Where a patent is granted for a composition made of several ingredients it covers and embraces known equivalents of each of the ingredients. The equivalent of any substance is another substance having similar properties, and producing substantially the same result. *Matthews v. Skates*, 1 Fish., P. C., 602.

See Identity, page 102; Infringements, page 93; Defeating Patents, page 43; Substantially, etc., page 39; Combinations, page 37; Specifications and Claims, page 35, and

CONSTRUCTION OF CLAIMS.

In construing the claim the Court takes into view the whole of what precedes it in the specification, and also such extraneous facts presented by the evidence, as may aid in giving construction to the patent, particularly the documents from the Patent Office which have preceded the grant of the Patent Office. *Johnson v. Root*, 1 Fish., P. C., 351.

Claims which can be construed to embrace meritorious combinations and devices will not be construed to embrace a principle, and to be therefore void, though they are capable of being so interpreted. *The Union Paper Bag Co. v. Nixon & Co.*, 4 O. G., 31.

The claim is to be construed as if the words, "substantially as specified" are in it. *Matthews v. Schoneberger*, 18 Blatch., 357.

A patentee is restricted to his claim, which must be construed with reference to the state of the art at the time of the invention. The whole patent, including specifications and drawings, is to be taken into consideration, but we look at that only for the purpose of placing a proper construction upon the claim. *Pitts v. Wemple*, 1 Biss., 87.

If it was intended to claim parts of that which is described in the specifications as a whole, it should have been so stated; but where it claims the whole as described we cannot sever one part of the description from the other, but we must take it in its totality and apply the description to the claim in construing it. *Evans v. Kelly*, 9 Biss., 251.

The courts have no right to enlarge a patent beyond the scope of its claim, as allowed by the Patent Office, or the Appellate Tribunal, to which contested applications are referred. When the terms of a claim in a patent are clear and distinct (as they always should be) the patentee, in a suit brought upon the patent, is bound by it, (*Merrill v. Yeomans*, 94 U. S., 568;) he can claim nothing beyond it. But the defendant may, at all times under proper pleadings, resort to prior use and the general history of the art to assail the validity of a patent or restrain its construction. The door is then open to the plaintiff to resort to the same kind of evidence in rebuttal; but he can never go beyond his claim. As patents are procured *ex parte*, the public is not bound by them, but the patentees are, and they cannot show that their invention is broader than the terms of their claim; or if broader they must be held to have surrendered the surplus to the public. *Keystone Bridge Co. v. Phoenix Iron Co.*, 5 Otto, 274.

Cases arise not unfrequently where the actual invention described in the specification is larger than the claims of the patent; and in such cases it is undoubtedly true that the patentees, in a suit for infringement, must be limited to what is specified in the claims annexed to the specification, but it is equally true that the claims of the patent, like other provisions in writing, must be reasonably construed, and in case of doubt or ambiguity it is proper, in all cases, to refer back to the descriptive portions of the specification to aid in solving the doubt, or in ascertaining the true intent and meaning of the language employed in the claims; nor is it incorrect to say that due reference may be had to the specifications, drawings and claims of a patent in order to ascertain its true legal construction. *Brooks v. Fisk*, 15 How., 215.

It is unnecessary to add to a claim an express declaration to the effect that the claim extends to the thing patented, however its form or proportions may be varied. The law so interprets the claim without the addition of these words. *Winans v. Denmead*, 15 How., 330.

If by an examination of the specification, and applying to the then existing state of the art, we can learn what the invention was, then a claim, which was designed to be a condensed summary of the invention, is to be construed so as to be co-extensive with the invention, if that can be done without doing violence to its language. *Andrews v.*

Carman, 13 Blatch., 307; Whipple *v.* Middlesex Co., 4 Fish., P. C., 41; Waterbury Brass Co. *v.* N. Y. Brass Co., 3 Fish., P. C., 47; Leroy *v.* Tatham, 14 How., 181; Haworth *v.* Harcastle, 1 Webster's P. C., 480; Turrill *v.* Railroad Co., 1 Wall., 491.

Claims and specifications are to be construed liberally but limited by the state of the art, showing the degree of improvement effected. Goodyear *v.* Berry, 2 Bond, 189; Mann *v.* Bayliss, 10 O. G., 789.

Claims should be construed in view of the specification. Hayden *v.* Suffolk Mfg. Co., 4 Fish., 86; Goodyear *v.* New Jersey Central Railroad, 2 Wall., Jr. 356.

The drawings as well as the specifications are to be looked to in giving a construction to the claims of a patent in determining what was the invention of the original patentee. Swift *v.* Whisen, 2 Bond, 115.

Technical claims in a patent are to be construed with reference to the state of the art, so as to limit the patentee to and give him the full benefits of the invention he has made. Estabrook *v.* Dunbar, 10 O. G., 909.

See Specifications and Claims, page 35; Combinations, page 37; Substantially, etc., page 39; Equivalents, page 40; Defeating Patents, page 43; Infringements, page 93, and

DEFEATING PATENTS.

To defeat a patent the prior knowledge and use must antedate the date of the invention, not the date of the patent. Judson *v.* Cope, 1 Bond, 327.

If experiments on the principle of the invention are not continued to completion, the proof of such prior experiments does not establish the fact of previous knowledge or use within the meaning of the patent law. Wayne *v.* Holmes, 1 Bond, 27.

To defeat a patent, both priority of invention and reduction to practice are necessary. Parkhurst *v.* Kinsman, 1 Blatch., 488. Cox *v.* Griggs, 1 Biss., 362.

Satisfactory and preponderating proof is required to defeat a patent for want of novelty. Strauss *v.* King, 18 Blatch., 88.

The similar machine relied upon to invalidate a patent must have been in actual use and in successful operation. Seymour *v.* Marsh, 2 O. G., 675. And a subsequent patentee, if he has reduced his invention to practice, will not be defeated by a prior invention which has not been reduced to practice. Bedford *v.* Hunt, 1 Mason, 302.

Where a patentee has used reasonable diligence in perfecting his

invention, he is entitled to priority over inventors who may have intervened between his invention and the issue of his patent. *Johnson v. Root, 1 Fish., P. C. 351.*

Under the Patent Act of July 4th, 1836 (5 U. S. Statutes at Large 117), a patent cannot be avoided by the fact that the invention patented was known and used in a foreign country before its discovery by the patentee, provided the patentee at the time of making his application for a patent believed himself to be the first inventor of the thing patented. No description in any printed publication of the thing patented can avoid the patent unless such description was prior, in point of time, to the invention of the patentee. It is not enough that the description in the printed publication should have been prior to the application for the patent. *Bartholomew v. Sayer, et al., 4 Blatch., 347.*

Evidence of knowledge and use in a foreign country will not, of itself, defeat a patent or be material. *Coburn v. Schroeder, 11 Fed. Rep., 425.*

Prior discovery and use in a foreign country, in the absence of its being patented or described in a printed publication, is no bar to the granting of a patent here. *Toucey's Opinion, 5 Op., 19.* And a patent will be sustained in this country, even though the invention was in use in a foreign country before the patentee originated it, unless it is shown that the patentee did not believe himself to be the prior inventor when he filed his application for a patent; the burden of proof is on the defendant to a degree beyond a reasonable doubt. *Roemer v. Simm, 5 O. G., 555.*

See Abandonment, page 24; Public Use, page 25; Priority of Invention, page 28; Joint Inventors, page 27; Infringements, page 93; Foreign Patents, page 122.

PATENT APPLIED FOR.

Until recently the Courts have not recognized an exclusive right to an invention pending an application for a patent. This doctrine was not adhered to in the following case:

U. S. Circuit Court, Northern District of Ohio, Eastern Division. *Butler v. Ball.* Decided April Term, 1886. Infringement—injunction pending issue.

Where a patent has been applied for on an invention the Court has jurisdiction to grant an injunction to restrain its infringement pending the hearing.

Messrs. Baldwin & Shields and Mr. Charles C. Upham for the complainant.

Messrs. W. W. & J. J. Clark for the respondent.

WELKER, J.:

The complainant claims to have invented a new and improved device for attaching memorandum-tablets to telephones, and described in his bill, and states that he has applied to the Patent Office, under the statute, for a patent for his invention, which is now pending and yet undecided. He alleges that the defendant is making and selling his device, and so doing him irreparable damage, and asks an injunction pending the hearing. The defendant demurs to the bill for want of equity.

The question raised is whether the Court has jurisdiction of the subject-matter before the complainant obtains his patent. Revised Statutes, section 629, provides that the Circuit Court shall have original jurisdiction "of all suits, at law or in equity, arising under the patent or copyright laws of the United States."

In Robb's P. C., 13, Justice Washington says:

"The general law declares beforehand that the right to the patent belongs to him who is the first inventor, even before the patent is granted. Therefore any person who, knowing that another is the first inventor, proceeds to construct a machine acts at his peril, with a full knowledge of the law."

In Jones *v.* Sewell, 6 Fish., P. C., 343, Justice Clifford says: "Inventions lawfully secured by letters patent are the property of the inventors, and as such the franchise and the patented product are as much entitled to legal protection as any other species of property, real or personal. They are, indeed, property, even before they are patented, and continue to be such without that protection until the inventor abandons the same to the public."

It seems to me that the Court, under these cases, is sustained in holding that the complainant is entitled to the relief prayed for while his application for a patent is pending, and therefore the demurrer is overruled. (Reported in 28 Fed. Rep., 754.)

[This decision is not, however, considered as being good law by many leading patent lawyers.]

RE-ISSUES.

When a patent is issued it cannot be changed except to correct mistakes "through the fault of the Patent Office," and it must be judged as it is and not as it might have been.

A re-issue is the only remedy for defective specifications and claims in a patent except that of a disclaimer, and these defects must arise from "inadvertence, accident, or mistake." See Rules of Practice, page 7.

The great danger in re-issuing a patent is the liability to incorporate in it something not shown or described in the original application, which, if done, will, in a degree, invalidate the re-issued patent. See Law under this subject. The inducements to add new matter or to give new coloring to old matter, to squarely meet existing and anticipated infringements are too great to make it reasonably safe to presume that this has not been done; hence defendants in infringement suits on re-issued patents have frequently found successful defenses through these fatal mistakes of re-issues.

Neither is it very consoling to know, see page 18, that all infringements on your defective patent count as nothing to you when you surrender your patent for a re-issue, and they will continue to count as nothing until your re-issue is made and then only from its date. You will lose all of the time between the dates of your defective patent and its re-issue, and this time will not be added to your re-issued patent, which will expire at the same time of your defective patent, had it not been surrendered.

The following statute, rules and decisions are quoted and cited for your guidance with reference to Re-issues:

"Whenever any patent is inoperative or invalid by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident or

mistake, and without any fraudulent or deceptive intention, the Commissioner shall, on the surrender of such patent, and the payment of the duty required by law, cause a new patent for the same invention, and in accordance with the corrected specification, to be issued to the patentee, * * * for the unexpired term of the original patent." U. S. Rev. Stat., Sec. 4916.

The right to correct by re-issue a mistake, to the effect that the claims of an original patent are not broad enough, may be lost by unreasonable delay. * * * The making of a claim and the omission to claim other matter apparent on the face of the patent, is a dedication to the public of the unclaimed matter. If two years public enjoyment of an invention with the consent and allowance of the inventor is evidence of abandonment, and a bar to an application for a patent, a public disclaimer in the patent itself should be construed equally favorable to the public. *Miller v. Bridgeport Brass Co.*, 14 Otto, 350. A patent cannot be re-issued in order to expand the claim beyond the invention specified in the original patent. *James v. Campbell*, 14 Otto, 356; *Swain Turbine Mfg. Co. v. Ladd*, 12 Otto, 408.

It will not do for a patentee to wait until other inventors have produced new forms of improvement, and then apply for a re-issue for the purpose of enlarging his claims to embrace such new forms. *Wooster v. Handy*, 21 Fed. Rep., 51.

An application for a patent for an improvement in caps covered a combination of the body of a cap and a neck protector. This was rejected on references, with the suggestion that the forward band be included, and the claim being so amended patent issued. The patent was afterward reissued for the original combination, on the ground of a mistake by a solicitor, of which the patentee first learned shortly before the re-issue. Held, that the validity of the patent is too doubtful to support a motion for injunction because of alleged infringement, for the reason that this does not appear to be such a mistake as would allow him to resume what the record of the Patent Office would show he had for so long a time left surrendered. *Arnhem v. Finster*, 32 O. G., 256.

But where the original claim was so ambiguous as to suggest a doubt as to its sufficiency, and was also open to two different constructions, held that it was not a mistake so obvious as to be apparent upon first inspection of the patent, and that the re-issue applied for within eleven months was made within a reasonable time, and that such re-issue was valid. *Western Union Tel. Co. v. Baltimore and O. Tel. Co.*, 25 Fed. Rep., 30.

The executors or administrators of a deceased patentee may apply for a re-issue, or his assigns may do so. *Carew v. Boston Elastic Fabric Co.*, 3 Cliff., 356. The *prima facie* presumption is that a re-issued patent has been properly surrendered and re-issued, and that presumption will prevail in the absence of any controlling evidence to the contrary. *Forbes v. Barstow Stove Co.*, 2 Cliff., 379.

The rules of the Patent Office furnish a form of application for the surrender of a patent; but the Act of Congress does not in terms require that it shall be in writing. Patents may be surrendered on petition or by delivery, as the rules of the Patent Office may prescribe. *Dental Vulcanite Co. v. Wetherbee*, 2 Cliff., 555.

A surrender of the patent to the Commissioner * * * * means an act, which in judgment of law extinguishes the patent. It is a legal cancellation of it, and hence can no more be the foundation for the assertion of a right after the surrender than could an Act of Congress which has been repealed. The antecedent suits depend upon the patent existing at the time they were commenced, and unless it exists, and is in force at the time of trial and judgment, the suit fails. *Reedy v. Scott*, 23 Wall., 352.

The surrender of a patent extinguishes it, and after its surrender pending suits founded upon it fail with its extinguishment. If a patent is surrendered for re-issue after final decree or judgment, the surrender has no effect upon a right passed previously into judgment. The right of the patentee then rests on his judgment or decree, and not on the patent. *Mevs v. Conover*, 11 O. G., 1111.

There can be no recovery of damages on a re-issue for infringements prior to the issuance thereof. *Agawam Co. v. Jordan*, 7 Wall., 583; *Woodworth v. Hall*, 1 W. & M., 248.

In the case of *Reed v. Chase*, 25 Fed. Rep., 95, the Court there decided that "if the claims of the re-issued patent, or of one or some of them, are either within the scope of the claim of the original patent, or are legally identical with it, to that extent the re-issued patent can and ought to be upheld;" Mr. Justice Matthews, of the U. S. Supreme Court, delivering the opinion of that Court at the Circuit.

Where a patentee has sold all his right, title and interest in his patent except as to a single town, and subsequently at the request of the assignees had applied for and obtained a re-issue of the patent in his own name, which re-issued patent he had assigned as before: Held, that the surrender of the original patent at the request of the true owners was valid, and that, if the re-issue to the patentee was a clerical error, he had corrected it by the subsequent assignment. *Wing et al. v. Warren*, 11 O. G., 342.

[Since the decision of *Miller v. Bridgeport Brass Co.* above cited, the U. S. Supreme Court, in the case of *Gage v. Herring*, 107 U. S., 641, decided that if the claim of the original patent be repeated in the re-issue, it can there be maintained if valid, although it may be associated with new claims for a new matter not appearing in the original, and wholly invalid. There are numerous instances also where Re-issued Letters Patent have been held to be valid since the *Miller v. Bridgeport Brass Co.* case, where such Re-issued Letters Patent were re-issued for the sole purpose and effect of going back to the original patent, as to the precise drawings and specifications and expression of claims.] See *Defeating Patents*, page 43, and

DISCLAIMER.

"Whenever, through inadvertence, accident or mistake, and without fraudulent or deceptive intention, a patentee has claimed more than that of which he was the original or first inventor or discoverer, his patent shall be valid for all that part which is truly and justly his own, provided the same is a material or substantial part of the thing patented; and any such patentee, his heirs or assigns, whether of the whole or any sectional interest therein, may on payment of the fee required by law, make disclaimer of such parts of the thing patented as he shall not choose to claim or to hold by virtue of the patent or assignment, stating therein the extent of his interest in such patent. Such disclaimer shall be in writing, attested by one or more witnesses, and recorded in the Patent Office; and it shall thereafter be considered as part of the original specification to the extent of the interest possessed by the claimant and by those claiming under him after the record thereof. But no such disclaimer shall affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing it." U. S. Rev. Stat., Sec. 4917.

A disclaimer is necessary only where the thing claimed without right is a material and substantial part of the patented article. *Hall v. Wiles*, 2 Blatch., 194. All that the disclaimer affirms is, that the plaintiff was not the first to invent what he disclaimed, but that it was previously invented by some one else. It does not affirm that the plaintiff did not invent it at all. *Schillinger v. Gunther*, 15 Blatch., 303.

If a patentee makes a claim which is not well founded in the same patent with other claims which are well founded he may disclaim, within a reasonable time, that which he had no right to claim, and

then the patent will be good as to the residue,—as good as if it had originally issued only for the claims which are valid. If he omits to make a disclaimer and brings a suit for the violation of his patent, and it satisfactorily appears upon the trial that he is entitled to be protected in a portion of the claims, if in his patent he is not entitled to be protected except to another portion, he is still entitled to damages for the violation of the valid portion of his claims, the same as if all the claims were valid so far as regards the mere right of recovery; but he gets no costs. This is the law. It has this qualification: if the jury are satisfied that there has been unreasonable negligence and delay on the part of the patentee, in making a disclaimer as respects the invalid part of his patent, then the whole patent is inoperative, and the verdict must be for the defendant. McCormick *v.* Seymour, 3 Blatch., 209.

What is "unreasonable delay" is a question to be settled by the Court—and not by the jury. * * * The Court will find that the time in reference to the question of delay, commences when the knowledge was brought home to the party that he was not the first inventor, or when it was declared by a court of competent jurisdiction to settle the question, that he was not the first inventor then it is that the time commences to run, and not until then. (15 How., 121; 19 How., 96; 20 How., 388.) Singer *v.* Walmsley, 1 Fish., P. C. 558.

Where the thing (or article) claimed without right is a part of the machine, if it is not an essential part, and was not introduced into the patent through willful default of the patentee to defraud or mislead the public, the want of a disclaimer in regard to it affords no ground for invalidating the patent. Hall *v.* Wiles, 2 Blatch., 194.

When a disclaimer is filed it becomes part and parcel of the original patent, as stated in the Statute referred to. See Re-issues, page 46; Defeating Patents, page 43; Patent Laws, page 7.

MARKING ARTICLES "PATENTED."

It shall be the duty of all patentees, and their assignees and legal representatives, and of all persons making or vending any patented article for or under them, to give sufficient notice to the public that the same is patented; either by affixing thereon the word "Patented," together with the day and year the patent was granted; or when from the character of the article this cannot be done, by affixing to it, or to the package wherein one or more of them is enclosed, a label

containing the like notice; and in any suit for infringement by the party so to mark, no damages shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued after such notice, to make, use, or vend the article so patented. U. S. Revised Statutes, Sec. 4900.

Every person who, in any manner, marks upon anything made, used, or sold by him for which he has not obtained a patent, the name or any imitation of the name of any person who has obtained a patent therefor, without the consent of such patentee or his assignees or legal representatives; or,

First, In any manner, marks upon or affixes to any such patented article the word "Patent" or "Patented," or the words "Letters Patent," or any word of like import with intent to imitate or counterfeit the mark or device of the patentee, without having the licence or consent of such patentee or his assignees or legal representatives; or,

Second, In any manner, marks upon or affixes to any unpatented article the word "Patent," or any word importing that the same is patented for the purpose of deceiving the public, shall be liable for every such offence to a penalty of not less than one hundred dollars, with costs; one-half of said penalty to the person who shall sue for the same, and the other to the use of the United States, to be recovered by suit in any District Court in the United States within whose jurisdiction such offence may have been committed. U. S. Revised Statutes, Sec. 4901.

Actions for the recovery of the penalty must be brought in the name of an informer, and not in the name of the United States.
* * * * Novelty and utility are essential elements of every valid patent issued. * * * * To justify the judgment for a penalty for putting the word "Patent" on an article there must be proof that the article was legally the subject of a patent if it had not been patented. U. S. *v.* Morris, 2 Bond, 23.

Where a man is carrying on a manufacture, and necessarily employs various persons, the acts of the persons he employs, if done according to his direction or with his sanction are in law his acts. Kass *v.* Hawlowetz, 33 O. G., 1135.

It must appear * * * * that an intention on the part of the defendant to affix a stamp or plate indicating that there was at the time a present subsisting patent upon the machine; and unless that appears * * * * and if there is no existing patent upon the machine, or any part of it, the offence is not complete. Wilson *v.* Singer Manfg. Co., 12 Fed. Rep., 57.

The language of Sec. 4901 is mandatory in form—"To be recovered

by suit in any District Court of the United States within whose jurisdiction such offences may have been committed." * * * * This act was passed long after the general act of 1839 provided for the recovery of penalties and forfeiture in any District where the offender might be found. * * * * The remedy to be pursued must be interpreted as a limitation confining the plaintiff to the District where the offence is committed, and the general provision of Sec. 732 that suits for penalties and forfeitures may be brought wherever the defendant may be found does not apply to suits under Sec. 4901. *Pentlarge v. Kirby*, 19 Fed. Rep., 501.

PERFECTING INVENTIONS BY REDUCING THEM TO PRACTICE.

This is where trouble usually begins and often lingers almost indefinitely. The many experiments and mistakes between your invention and its practical operation if fortunately this advanced stage is ever reached, will likely be sufficient to quite exhaust your patience if not your resources; that is, in case your invention is really valuable, which we will assume it to be in our consideration of this heading of our subject, and we will also, for brevity, assume that it relates to an independent machine for general use.

I base this opinion upon the well-known experiences of others of acknowledged ability in the line of their inventions, which may be considered as being a fair index in advance of your memoranda of experiments. If you are a practical workman in the line of your invention, or if you possess a thorough mechanical understanding with reference to it—which by many is considered preferable—your task is much lighter and any suggestions on my part may seem to be presumptuous; but believing that many of your mistakes will be born of your over-confidence, which is the rule and not the exception with inventors, I

will venture to drop a few hints that will at least have the merit of doing you no harm, and should you be benefited by them an acknowledgment from you by mail will indeed be gratifying and your communication will be filed in my "secret archives."

You are familiar with the state of the art and with practical machines of its class, if any there are, not only with reference to their operation, but with reference to their manufacture, the kind of material used, proportions, etc., etc.

Learn all of the important changes which they have undergone in both material and manufacture from their first introduction and, if possible, learn the reasons for the changes; when practicable, secure a machine of the latest model and style which is the nearest approached by your invention, and at least reproduce it by drawings. You can thus learn necessary "fixed" distances and many other things that you will find very useful in planning your machine.

Decide upon every detail before commencing operations and combine beauty in design with *commercial* utility, but never sacrifice *commercial* utility for beauty in design, as your machine must meet the requirements of use and practice. Employ in its manufacture the same kind and quality of material to be employed in your machines for general use. See Manufacturing, page 59.

After having tested your machine yourself and so far perfected it as to pronounce it complete, have it operated by different persons whose occupations are in the line of its use, and more especially by some whose ingenuity has never been developed and quite likely never will be. Give as few instructions as possible and closely watch its operation.

If you discover that it is being handled awkwardly, which may result in breakage, do not interfere with it but

let it break, as it must be made to stand awkward handling.

I have been told by men of experience, good judgment and close observation, that an inventor is incompetent to make the thorough and severe tests of a machine of his own invention, which must be made before it can be put on the market and meet with general success. He has studied it so long and knows it so well, with the mechanical causes and effects, that he will "mechanically" favor it in the face of his firm determination to break it if possible.

I have unsuccessfully undertaken to break my mowing machine in testing it with a pair of "6000" horses, by running the cutting apparatus against solid rocks, and the same machine was broken the next day by a farmer with a pair of ponies. As an evidence that it was not because of the strain I gave it, other machines, built at the same time from the same patterns and of the same material, that were out on tests, were breaking in the hands of farmers by being stopped against obstructions.

Well, to resume. Your machine is broken, so take it back to the shop and change it, but do not be in such haste that you cannot wait for the arrival of proper material, and do not substitute brass for malleable iron and the like, for you will regret it if you do before you are through testing it.

Use it first yourself under the same awkward conditions which caused it to break before, and if it stands the test get, if possible, the same person who broke it before to again test it, when other weak points may be developed and the operation will have to be repeated.

You have been getting some valuable experience of your own, and you now pass from experiment to practice by placing your machines upon the market. You have arrived at the great danger point. You are likely to manufacture too largely, for the probability is that weak

points and other imperfections will be developed by general use; so build but a limited number at first and place them near home, to be convenient for repairs. The next lot you manufacture will likely meet all requirements when you can safely call your invention reduced to practice, and here permit me to state that you had better let "well enough alone" and not be making little changes. You likely know of machines which, to use a common saying, "have been improved until they are spoiled." I recall an instance where a successful machine was "improved," and to connect the device a hole for a 3-8 inch set screw was drilled near the center of a solid grey iron casting having over a four inch lateral surface. No one thought of trouble resulting, but these castings invariably commenced cracking at this set screw and finally broke, totally disabling the machines. The result was very disastrous, as thousands of them were scattered throughout the country.

If you find it advisable to make a change, however slight, build a few machines of the new pattern and put them out near home, as in the first instance.

My remarks thus far under this heading have been based upon the assumption, as stated, that "you are a practical workman in the line of your invention," or that you "possess a thorough mechanical understanding with reference to it;" but should I be wrong in my assumption and you are wanting in either or both of these qualifications, you may, unfortunately, have to rely more or less upon the judgment of others in reducing your invention to practice, and you will meet with much difficulty in securing the services of competent mechanics who will comprehend the full nature and scope of your invention and the mechanical requirements necessary to reduce it to practical operation, unless you employ mechanics who are skilled in the art, that is in the line of your invention,

and even they, as a rule, will be skilled only in the manner of construction, and not in the practical operation of similar machines. They will know how the different parts of similar machines are made, which they can easily duplicate. They will also have theories as to the practical requirements of actual use which caused these parts to be employed; but they will be only theories upon which it will be unsafe to reason from cause to effect. The cause being the want and the effect the want supplied by the machine in operation—two essential extremes with which these mechanics have had nothing to do and they undertake to solve a problem from the means only, long since found to have been an impossibility.

Confine these mechanics to their experiences and they are only qualified to duplicate or copy. If left to themselves, with the plainest *verbal* instructions, your machine will so much resemble others of its class as to have no prominent identity, although it is essentially different, and you will indeed be surprised at the proportions of material in the new features of your machine and at the unexpected arrangement of parts. You test the machine thus produced against your better judgment and experience, the expected result a failure, which in some way will be known to every man you meet on your way home, who will shower you with sympathy and regrets and pass on to enjoy the fun with your mechanics, who "knew all of the time that the machine wouldn't work, but they might as well take your money as anybody." This is not a picture of fancy drawn to amuse, but a painting from real life of many years ago, presented to instruct. The principal actors are living to-day. It is not an exceptional circumstance, as like experiences are constantly being realized, but for a reason which I hope you will not anticipate, this particular one is impressed upon my mind. Your experience will quite naturally induce reflec-

tion, which will result in a quick and full settlement with your mechanics.

Your experience will also result in the conclusion that as you alone are in possession of the extremes from which the means can always be determined, you alone are qualified to improvise the means to be employed in arriving at a practical termination.

On further reflection you will conclude that your knowledge of the requirements of your machine, combined with your knowledge of the strength and proportions of similar machines, will enable you to approximately anticipate the means of your own which are the connecting devices between invention and operation; so you employ draughtsmen who will scrupulously follow your instructions and mechanics who will execute them well and faithfully and keep their ideas to themselves, except on those points which may be purely mechanical. As to these mechanical points, hear their reasons and decide for yourself. Acting upon these conclusions, and in all cases of doubt favoring strength and simplicity, you may reasonably expect as good results as you would attain were you "a practical workman in the line of your invention," or "possessed a thorough mechanical understanding with reference to it," which was previously assumed by me under this heading of my subject and to which, at this period of your operations, I invite your attention, in the hope and in the firm belief that you will be materially aided in your efforts.

SIMPLICITY.

In this connection, I wish to call your attention to the word "simplicity," and its meaning, which is so little understood with reference to mechanics. This word, being

safe to use, on general principles, has become popular, and the "average man" will hurl it at you and your machine, as an evidence of his superior knowledge and wisdom, and accompany the hurling with an "I told you so" wink at the bystanders. This peculiar wink is born of ignorance and is as short-lived as the injury it does. You have learned to know it at sight, but you can't imitate it; your soul is n't small enough, nor never will be. By way of parenthesis, permit me to add: that it may prove to be a very valuable wink to you, as you can "size up" the crowd by it. The answering winks of approval will come from those you had better let alone.

A machine is simple, however complicated may be its mechanism and parts; if the same results cannot be obtained by simpler mechanism or fewer parts.

In comparing one similar machine with another for simplicity, the parts accomplishing the same results can only be considered; as in comparing two watches, one with and one without a second hand, the second hand and its connections should not be counted.

SPECIAL MACHINES AND DEVICES.

What we have considered with reference to "independent machines for general use," will be more or less applicable to special machines, and to attaching devices, like a hemmer to a sewing machine, hereinafter referred to. Draw the line sharply at *commercial* utility, simplicity and beauty in design, with a proper reduction to practice before an attempt at regular or general use. The best possible results may then be expected with the fewest annoyances, and at a minimum expense.

MATERIAL AND MANUFACTURE.

Many good mechanical features are rendered worthless in practice by the employment of inferior material and by poor workmanship. The highest degree of perfection may be attained in forms, in proportions, in sizes and in patterns, but in the absence of good material and of good workmanship failure is certain. Paint, putty and varnish may, on exhibition, deceive the public, but will not deceive those who actually use your machines.

Before perfecting your invention by reducing it to practice, you should decide upon the kinds and quality of material to be used in manufacturing for the trade. See page 53. In fact you must do this before you will be able to properly make the drawings of the different parts; as the forms, sizes and proportions of the patterns will necessarily be governed by the kinds and quality of the material to be used.

If you are a novice in these matters you will make a serious mistake to proceed without first informing yourself regarding them. Consult persons experienced in the different kinds of material which you contemplate using, and receive their reasons for their opinions, as stated on page 9.

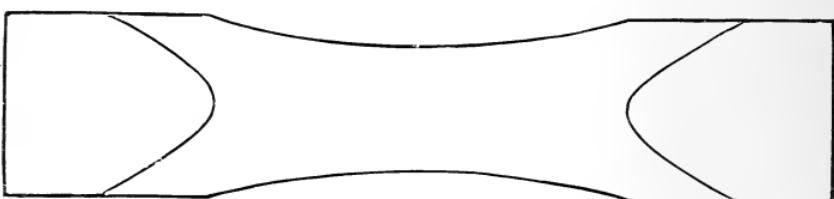
After having decided upon the different kinds and quality of material, you will, as a rule, be able to decide upon forms, sizes and proportions by comparison with other pieces of the same kinds and quality of material wherever they may be used, which, in your judgment, require strength in actual practice equal to the requirements of your own.

After you have settled these points and before you make your drawings or set your pattern-makers at work you should learn of the shrinkage of different castings from different patterns, both of the same and of different

kinds of material. This you can easily do by consulting foundrymen. In each case call their attention to ribbing patterns, to insure lightness and strength, to prevent unequal shrinkage, and to prevent warping; this, more especially, if the castings are to be malleable.

You likely will use metal patterns for general manufacture, therefore, you must allow for two shrinkages in designing your wood patterns; one shrinkage from the wood to the metal patterns, and one shrinkage from the metal patterns to the castings for use.

The quality of grey iron castings you will find very different, made at different foundries, as well as at the same foundry; not only in different meltings but in the same melting; so that you will be puzzled in deciding upon the quality to use and also in producing this quality regularly. To aid you in coming to a decision, I give you a test, as follows: Make a spool having two square ends, as shown full size in this engraving. The smallest



diameter of the spool should be $\frac{1}{2}$ of an inch. Make three castings from it—one from the first, one from the middle, and one from the last of the heat in the cupola. Place one end of each casting in a vise and attach a wrench to the other end. Connect a spring balance to the handle of the wrench just four feet ten and five-eighths inches from the center of the square of the casting. Lift on the spring balance until the casting breaks. If it breaks with a lift of twenty-two pounds the casting will be first-class in strength and what I term

"agricultural standard." The same test can be used on any grade of castings that you may decide to make, as you may require these test castings to break at a greater or less number of pounds lift on the spring balance.

The three test castings, made from the same heat, as stated, will probably not break with the same number of pounds lift; but you will soon learn from experiments, in charging your cupola and in melting, to have them nearly alike.

Make these test castings at every heat in manufacturing, and break them in the manner stated. Keep a record of the result of the tests of each heat, and also a record of the different kinds of pig iron used, the manner of charging the cupola, including fuel and the amount of blast.

By this method you will produce an even quality of castings, without which even quality, it will be very unsafe to manufacture.

It will be necessary for you to make experiments in charging your cupola with the different kinds of iron, to obtain not only the required strength but the required temper. Always draw the metal from the cupola in a large ladle, so that it will be well mixed, otherwise tests of any kind will be of no use.

You cannot exercise too much care in preparations for manufacturing, either with reference to your patterns or with reference to your special tools and machinery. Make like parts of your machine, so that they will be interchangeable, and do not make the very common mistake of piling up finished material of any part or parts before you have assembled a few machines and know that all of your preparations are correct. The extra time and expense that will be required by this method in making your preparations to manufacture will, in a short period of time, be fully compensated by lessening the cost of labor, and by a more perfect production. Make and

connect coil springs so that the working tension will be on closing, and do not use brass wire in their manufacture.

Avoid, if possible, the common mistake of under-estimating the time and cost of making these preparations, for these under-estimates are both disheartening to associates and disappointing to parties from whom you may have received and accepted orders for your machines.

See Want of Means on this page.

OPERATING INVENTIONS.

Want of Means.—Undivided Interests.—Patent Right Men.—Lost Opportunities.— Locations, Special.— Locations, General.— Devices for Attachment.—Patent Agents and Patent Brokers.—Introducing Inventions.—Territorial and Shop Rights.—Grants.—Royalty.—Licenses.—Assignments.—Partnership, etc.

WANT OF MEANS.

From want of means you may be unable to independently follow my suggestions and it will be necessary for you to enlist capital in your invention. I wish, therefore, to refer to the great injury inventors have done themselves by placing their inventions before the public in imperfect machines, which have caused great losses, that are charged to the cost of reducing inventions to practice.

For example, \$1,000 are expended in developing, patenting and perfecting an invention, when \$25,000 worth of machines are manufactured for the market, and a reasonable expense incurred in advertising and selling. The machines are all sold to responsible purchasers under the usual guarantee to meet requirements, and are duly shipped to destinations regardless of distances. They develop weak points and imperfections in use, by reason of which the purchasers do not remit, and instead of receiving

money as expected, extraordinary expenses are incurred by sending out mechanics, material and repairs to "patch up" the machines wherever found, amounting to several thousand dollars.

If but one-half of the machines are returned with an additional expense of double freights and a discount of but twenty-five per cent. is made from the purchase price of the remainder, the outcome, under the circumstances, will be fortunate indeed. To all of these losses must be added a damaged reputation expensive to repair, in both time and money, however valuable the new features of the machines. These losses, caused by disregarding the necessary precautionary measures herein detailed, or by a want of knowledge of them, will be added to the original \$1,000 and the whole amount will be charged to the expense of developing, patenting and perfecting the invention.

Another expensive start is thus added to the thousands of previous ones to prevent capital, which is always timid, from joining inventors who are themselves, as a rule, responsible for this state of things. True it is that parties in interest, eager for dividends, and impatient at delays, frequently overrule inventors and bring on these disasters; but whoever may be responsible the effect is the same, with its disheartening influences, to operate against the success of inventors depending upon outside capital. Strange it is, that persons will jeopardize so much by undue haste with so many examples of these wrecks before them, but like consumptives dying "by inches," they can never find a fatal case which parallels their own.

Returning to your case, "want of means." You have developed your invention to a degree necessary to enable it to be fully understood by another, and you are familiar with machines or devices of its class. You have made the

examinations (herein recommended) in the Patent Office, page 30, and you have before you copies of patents from which you know the state of the art, and you have a clear and definite idea of what you can claim as new, combined with statistics as to the probable demand, with carefully prepared estimates of cost, profits, etc. Digest all of these matters in their order, with memoranda, which you must study and be able to present intelligently. Formulate a business programme and provide, when possible, for both a positive and a speculative dividend for the money to be invested. A positive dividend will inspire confidence; a speculative dividend will induce investment and cannot be found in approved investment securities.

Select a person possessing surplus means and present to him the whole matter; do not make rash and flighty statements, nor talk too much; better err on the conservative side. If you fail with him, request his silence and try again. You are certain to find some one who will enlist in your enterprise. Your systematic business methods thus demonstrated will command confidence in you which is as necessary in securing to you the best results as is confidence in your invention. Your habits will be scrutinized and, perhaps, tested by invitations to "indulge" in a familiar and commonplace manner.

Assuming that you and your invention meet approval and that negotiations are begun, your business inexperience may place you at a disadvantage and you may be benefited by suggestions based on practical experience, statutes, rules and legal decisions. The experience of your friend in these matters may be limited also, so that with the most honest intentions on the part of you both a contract may be entered into which in law is very different from what either of you intended. Time may disclose this fact to the injury of one or the other, when,

from the weakness of human nature, it may be used without mercy.

We will first proceed upon the theory that your invention is to be reduced to practice in an independent machine, and is not a device or devices for attachment. I speak of "reducing to practice," assuming that you will not fall into the common error of arranging only to secure a patent except for speculative purposes, and if speculative only, I will not "speculate" with reference to the probable outcome, but in this regard you may be profited by my remarks on the practical line of your business and by the references cited.

A common method of dealing is to assign an undivided half of an invention, or some

UNDIVIDED INTERESTS.

which I advise you not to do unless you would dispose of the whole for about the same consideration; as with an undivided interest your friend has the advantage, by being able to go into the market with your patented machine wholly independent of you. He has the means which you have not, and owning an undivided half or any undivided interest in your patent, however small, he can proceed without you, and whatever his success, in law he is not obliged to contribute to you or to any owners of the remaining undivided interests.

You can also proceed just as independently without him, but how can you proceed without means which you now will find it very difficult to obtain, as you must compete in the market with your own invention. Your advantage as inventor will be small against his capital, combined with the knowledge and interests he obtained from you, besides he may "keep in" with you until your ingenuity, skill and services can safely be dispensed with, when you may be consigned to the ranks of cold charity.

Your friend incurs an equal risk at the outset, as you may pocket what he gives you for an undivided half, desert him and "set up" for yourself when you have a fortunate combination which he has not, viz.: means and the skill of an inventor.

With these facts before you, supported by the following decisions—see also Assignments, page 88, you likely will not assign undivided interests in your patent without providing in the assignment or in a separate written contract that your interests shall be operated together, and that there shall be an accounting to each other on the basis agreed upon, and also other provisions necessary to fully include your agreements. The title to your patent might be placed in the hands of a trustee (to prevent transfers of any interests therein), and a separate written agreement made with reference to the whole matter. This latter method will likely afford the greater security and to my knowledge it has been approved and endorsed by parties who have adopted it.

Abram M. DeWitt *v.* The Elmira Nobles Mfg. Co. This was "an appeal from an order made at the special Term sustaining a demurrer to the complaint. The complaint alleged that in 1871, letters patent were issued to Watrous & Kellogg, for an invention relating to the construction of augers; that subsequently the interest of Kellogg therein was assigned to the plaintiff; that defendant had used the rights granted by the letters patent at its manufactory in Elmira. It then alleges that said Watrous, one of the co-patentees, had an arrangement and agreement with the defendant, whereby the defendant was, "so far as he, said Watrous, was and is concerned," to have the right to use the said patented improvement, and that the said use thereof by the defendant was under such agreement, but that the same had reference solely to the rights and interests of the said Watrous. The defendant had notice of the assignment of the said one-half from Kellogg to the plaintiff."

E. P. Hart, for the appellant.

S. Dexter, for the respondent.

BOARDMAN, J.:

"The defendant is an owner, by assignment, of an undivided half of a patent, of use and value in the manufacture of augers, and for some time past has been using such patent in making augers. The plaintiff is also the owner, by assignment of the other undivided half of said patent, and brings this action against the defendant to obtain an accounting for the use of said patent and improvement, and payment to plaintiff of one-half of the value of the use of such patent or improvement during the time the defendant has used it.

The demurrer insists that the Court has no jurisdiction of the subject of the action, and also that the complaint does not state facts sufficient to constitute a cause of action against the defendant. The demurrer was sustained upon the latter ground.

These parties are not partners in the ownership of this patent. Beyond doubt they are tenants in common, each owning the one undivided half. Each as an incident of his ownership, has the right to use the patent, or to manufacture under it. But neither can be compelled by his co-owner to join in such use or work, or be made liable without his consent for the losses which such co-owner may incur in using or working the patent. (*Clum v. Brewer*, 2 Curt., C. C., 506-524; *Curtis on Pat.*, Sec. 136, etc.) There has been no conversion of property by a sale of plaintiff's share to the defendant. If there had been, it would have given plaintiff a right of action against the vendor for the value of his interest wrongfully sold; or he could follow the property, claiming his interest and right of possession. There has been no destruction of plaintiff's property or interest under the patent. The nature of the property is such that either owner may use it, and neither can exclude the other from the use. The rights, being abstract and intangible, cannot be destroyed by use or sale; nor can plaintiff lose his right except by his own act and consent.

In the case of real estate, one tenant in common cannot be called to account for the use, profits, or rent of the property enjoyed only by him, if he has not excluded his co-tenant therefrom. (*Woolever v. Knapp*, 18 Barb., 265; *Dresser v. Dresser*, *Ibid.*, 300; *Wilcox v. Wilcox*, 48; *Ibid.*, 327; *Curtis on Pat.*, Sec. 189.) So long as one tenant does not exclude his co-tenant, he does not become liable for the use of the joint property. These rules apply equally to chattels, and, with great force, to the property in a patent right, in which, from its nature, there can be no exclusive use or enjoyment, and each owner can at the same time have, use and enjoy the thing patented, or its use or its product."

In opposition to these views is the case of *Pitts v. Hall* (3 Blatch.,

201, cited in *Curtis on Pat.*, 4th edition, 211 N.Y.). That case holds that where one tenant in common in a patent right sells the whole interest in the patent, his co-tenant may maintain an action for an infringement against his co-owner and recover his proper damages.

It is certainly very doubtful if this case accords with the law applicable to ownership in common, as held by other courts and judges. But, in that case, the action is said to be maintainable upon the ground that one tenant had sold the whole interest, thereby constituting a conversion of the share belonging to his co-tenant. In the case under consideration the vendor to defendant did not assume to sell anything but his own rights, and did not attempt to sell the right of his co-owner. It is, therefore, distinguished from the case of *Pitt's v. Hall*, and should not be controlled by it.

The plaintiff's counsel has presented with great clearness the difficulties, if not the wrongs, following our construction of the law; they are also shown by Judge Hall in the case cited. A contrary decision would involve other hardships, if not wrongs of equal or greater severity.

The adjustment of the rights of tenants in common is exceedingly difficult, and, in some cases, impossible, upon any just and equitable basis. Under the law as administered in this State (New York) we think the judge at special term was correct in holding that no cause of action was set up in the complaint. The order of the special term should, therefore, be affirmed, with \$10 costs and expenses of printing, with leave to amend, upon payment of costs of demurrer, and of this appeal within twenty days.

LEARNED, P. J.:

"I agree with the result of the foregoing opinion. It seems to me that the rights of the parties are more plainly seen, if we observe that letters patent for an invention simply give a right to bring actions against other persons, and thus prevent them from doing what they might otherwise lawfully do. (*Hawks v. Swett*, 11 S. C., 146.) The rules applicable to tenants in common of things may therefore not be applied to the united owners of what consists only in authority to bring actions." Order accordingly. [Reported in 5th Hun., 301. Affirmed in 66 N. Y., 459, Court of Appeals.]

"In the case of joint patentees, where no partnership agreement exists, such co-partnership does not result from their relation as joint patentees; and the assignee of one joint owner does not become a partner of his co-proprietor. They are simply joint owners or tenants in common, and their rights, powers and duties as respects each other

must be substantially those of joint owners of a chattel. Pitts *v.* Hall, 3 Blatch., 201."

An injunction should not issue against the use, by one of the joint patentees, of the thing patented, and the principle decided by him (Judge Curtis) * * * * is that one tenant in common of letters patent has the same right as the others to make, use, and sell the thing patented, and a licensee under one tenant in common cannot be enjoined on a bill by another tenant in common. Dunham *v.* Indianapolis & St. Louis R. Co., 7 Biss., 223.

Opinion by Treat, J., Circuit Court for Missouri. (1878.) Statement of facts. The plaintiff avers, substantially, that he is the owner of an undivided two-thirds interest in the patent described, and that he is so doing under cover of their common patent. Hence the claim for damages for said infringement—not for the entire amount thereof, but for the plaintiff's proportion, to wit, two-thirds. The direct question presented is whether an infringer of a patent can escape liability for his infringement because he is a joint owner of the original patent upon which the infringement occurs. The cases cited do not reach the precise point raised by the bill. It is evident that if a stranger was guilty of the infringement he would be compelled to respond in damages. Can a part owner infringe the common patent, and escape all liability? If he can it is obvious that, however small his aliquot part, he can make the enjoyment of the patent valueless to his joint owner. He has, by virtue of the joint ownership, a right to use the patent, but he has no right more than a stranger to infringe the same. If there is an infringement the right of recovery is in the party wronged. All the joint owners should ordinarily be parties plaintiff, but if the wrong doer is one that is guilty to the damage of the other joint owner, the latter should not be left remediless. As to such infringement they are strangers. All the joint owners are on the record, and the amount of the recovery determines their respective interests. The infringer cannot escape the consequences of his wrong to his joint owner by averring that he was by his infringement injuring not his joint owner alone, but himself also. In other words, he cannot under cover of his interest in the common patent shield every wrong doer who may infringe that patent. He can, as to the other part owners, by infringing, become liable to them for the wrong done. The amount of recovery will be in proportion to their respective interests. Were this not so, the door would be open to the grossest frauds by one joint owner against all other joint owners. The case of Pitts *v.* Hall, 3 Blatch., 204, and the comments thereon in Curtis on Pat., Sec. 108, *et seq.*, do not cover the case. The question

there discussed pertains to the use by one joint owner of the common property. * * * * In this case an entirely new and distinct proposition is presented, viz.: One of the several joint owners is not using the common patent, but an infringement of the patent. His defense is that inasmuch as he had a right to use the original patent without question from his joint owners, * * * * he has a right also to use any infringing patents, on the ground that his right to use the original being vested in him, his use of other and infringing patents did not cause any wrong or injury to himself as joint owner. In other words, the defendant contends that as one joint owner he could use the common patent without being liable to account to the joint owners; that he could not be sued as an infringer for using what he had a right to use by virtue of his proprietary interest; and therefore if he used an infringing device he was only injuring himself in what he had a proprietary right to forbid. This would be correct if no interest except his own were involved, for a man may do what he pleases with his own, and ‘volenti non fit injuria’ would be, *a fortiori*, applicable in such a case. If a stranger were using the infringing patent this action would unquestionably lie against him; and the question before us is whether it will lie against a joint owner, or, in the language of the bill, whether he, under cover of his joint ownership can infringe and escape liability. So far as the acts outside of his interests, or rights or powers, as a joint owner, there is no adequate reason for treating him *quoad hoc*, otherwise than as a stranger. If this be not so, then one joint owner may destroy without remedy the rights of the other joint owners. Demurrer overruled. Herring v. Gas Consumers' Association, 3 McL., 206.

See Territorial and Shop Rights, page 80; Assignments, page 88; Employer and Employe, page 114; Partnership, page 93.

PATENT-RIGHT MEN.

The time has passed for the successful operation of so-called patent-right men in the sale of patents “on the road,” by Towns, Counties and States; as the people generally can refer to too many precedents of losses by their neighbors in these speculations. So many worthless patents have in this way been sold almost every-

where, that a man now thus engaged in the patent-right business requires strong certificates of good character to be sent in advance to insure for him a respectful hearing, and then he will quite likely write home for money to enable him to leave town.

True, many valuable patent interests have been disposed of in this manner; but, as a rule, they have been disposed of to persons who, from their want of experience, good business qualifications or means (if not from the want of them all) have been unsuccessful in their operations, or have permitted these interests "to sleep" on their hands and have therefore been losers. The result is that patented articles must now reach the public through the regular channels of trade, and patent interests must be disposed of at the source of these channels, either to parties engaged in business in the line of the inventions, or to those willing to engage in it. The practical questions are, can you deal advantageously with parties established in the business to which your patent relates, or must you establish a business of your own?

Continuing in the assumption that "your invention relates to an independent machine for general use and is not a device for attachment," you will find it exceedingly difficult to deal on a living basis with parties established in your line; or in fact on any basis, however meritorious your invention.

They may appreciate the new features of your machine and concede its superiority over all others, including their own; but they will tell you that "theirs gives satisfaction to the trade; that it has been approved and established, whilst yours has not; that their patterns, tools and machinery are especially adapted for the manufacture of their own machines, and would be practically worthless for the manufacture of yours; that their mechanics, salesmen, agents and customers are familiar with

theirs, and while yours is simpler, both in construction and in operation, more or less friction would result from the change which they desire to avoid." They know that their business would be seriously crippled with your machine prominently on the market; but this is a possibility too remote to influence them in your favor, as they anticipate that it will be some time before you will be able to give your machine a general introduction and then, from their personal experiences and observations, they will expect imperfections common to introductions that will give you a "set back," from which your recovery will be slow, if you recover at all.

After having these experiences you very naturally will go back to first principles and endeavor to secure an independent start; either with means of your own, or by soliciting private capital, or by organizing a stock company on a basis whereby you are to receive a portion of the paid up stock in consideration of your patent interests, a very common method and also a very dangerous one; for inventors find it necessary, as a rule, to permit the majority of the stock to be held by those who contribute the money. This programme will place your interests wholly in the hands of others, and the chances are that if your invention proves to be valuable a "freeze out" programme will be inaugurated and carried out by a "do nothing" policy, by the issuing of bonds, or by some other means to depreciate the value of your stock, and finally "wipe it out" altogether by a foreclosure under the bonds, or by other procedures.

You will find it a safer way to take less of the paid up stock for your patent interests, and in your transfers of them to the company, provide instead, for a small royalty on each machine manufactured to be paid to you annually. This method will, as a rule, be more satisfactory at first to investors, and it destroys to a great degree the induce-

ments to "freeze you out" on your stock, and you cannot be "frozen out" on your royalty.

You should make reasonable provisions for your protection by requiring a certain amount of royalty to be paid annually, by requiring continuous reasonable business diligence, by requiring an annual statement at the time the royalty is due and payable to be made to you in writing of the number of machines manufactured during the next preceding fiscal year, which statement may be verified by your examination of the books in person, or by proxy, or both, by requiring that the machines shall be numbered consecutively, and that each machine shall be properly and prominently stamped with its name, with the word "patented," and with the dates of all patents thereon, by requiring that no competing machines shall be manufactured, and by requiring that the validity of your patents shall not be questioned, and that no attempt at their evasion will be made.

The proportion of the capital stock and the amount of royalty you should receive will depend, of course, upon circumstances. Equity seems to require that they should amount to sufficient to insure to you in dividends and royalty combined, ten per cent. of the gross amount of sales made to jobbers, dealers and agents, and to a proportionate per cent. on sales made to the retail trade, assuming that your invention possesses an average earning capacity.

No general rule can be laid down with reference to this matter. Twenty per cent. may be more equitable in some cases than five per cent. in others; so each case must be decided by itself. This brings us to a point where it will be well to consider

LOST OPPORTUNITIES.

You must keep in mind the fact that "you can never grind the grist with the water that is passed," hence you

should never reject a proposition hastily that possesses a degree of fairness; better utilize this water than to wait until a "dry time" and look back with regrets at your "lost opportunity."

However much you may value your invention your success will depend upon its valuation by others,—those having the means and time perhaps to devote to it. You can establish a price; but you cannot make the price current, so too you can keep your invention as many do who are in great need of even a small income from it and would like just one more opportunity to "grind the grist." Am I too conservative? Go and talk with fifty inventors without selection having patents over five years old, and see if you can send me the names of three who will disagree with me in this matter. You may charge each failure to poor management, which in your opinion will not meet your case, and certainly not if you will "hew to the lines" herein drawn in your interest.

LOCATIONS—SPECIAL.

Much depends on location, more perhaps than you without experience will understand. As a rule you should select a point for your operations where similar enterprises are successful, and where the citizens have learned of the business, and personally know of its importance, stability and prosperity, in addition to the fact that their locality has been proved a favorable one for its headquarters. You will not receive the answer that "I don't know anything about the business, and I never invest in anything that I don't know about," or that "you cannot successfully compete with established concerns," when

they know of and, perhaps, own stock in a junior concern that is really senior in the volume of business and in financial success, or that "there is no room for your enterprise," when they know that theirs are running over time more or less, and are behind in filling orders, or that "your financial success will be very uncertain," when there is no stock of their similar enterprises on the market, and many other answers which their home experiences have settled in your favor.

It is a mistaken idea that you should not locate so near competition, unless your trade is to be local; but I am assuming that it is to be general, and if it is, the nearer you locate to competition the better.

You will meet with the same competition in trade if you locate elsewhere, and you will not have the aid of your competitors in bringing you business, which they cannot avoid when you are their neighbors. Their own customers will call on you before closing with them, and will see your improvements and works, which many never would see were you located elsewhere.

It is not necessary for you to travel all about the country on borrowed money, perhaps, to select a location of this kind. You know, or ought to know by this time, where similar enterprises are located and all about them, and if you don't know you can easily learn without leaving home. Go to some friend in business who is a subscriber to Commercial Reporters and get him to "help you out." Subscribe for papers representing your line of business and write their editors for some information.

Having selected a good location your task is one-half performed. You have a business programme similar to the one laid down on pages 63 and 64. Select and secure the proper person or persons to aid you and your success is reasonably certain.

LOCATIONS—GENERAL.

The recognized value of manufactories in developing and adding to the material growth and wealth of localities is a great incentive in securing their establishment by enterprising citizens, and the result is, that inducements are offered at many places for this purpose. An advertisement in newspapers representing manufacturing interests will bring you letters which will put you in communication with parties from different localities, that may lead to negotiations and to satisfactory results.

First of all consider the advantages and disadvantages of a location for your business before deciding, and, however great the inducements, do not handicap your business by locating where you cannot successfully compete with rival concerns.

Having established your enterprise I call your attention to pages 59 and 62.

DEVICES FOR ATTACHMENT.

If your invention relates to devices for attachment, like a hemmer to a sewing machine, you have at least two practical methods of introducing it to the public.

First, by manufacturing and selling to manufacturers of, or dealers in, the principal machines, or by establishing agencies of your own, and

Second, by licensing the manufacture of your invention for the purposes of attachment.

As a rule the latter will be the better course to pursue, and in pursuing it a practical method will be to complete your devices and respectively arrange them for attachment to the different machines. Send one so arranged to each manufacturer with explicit instructions as to its attachment and use.

You will soon receive inquiries as to terms and thus enter into and perhaps complete negotiations for their introduction and use with little trouble and expense. Whatever your terms, make them the same to all manufacturers. Confine them to the machines of their own manufacture, and make proper provisions in your contract for your protection. See pages 73, 81 and 82.

In thus sending your devices to manufacturers you incur a risk, which unfortunately is too often incurred by the operations of superintendents and mechanics of the manufacturers, to whom the devices will likely be referred for their "expert" opinions.

Superintendents and mechanics you will find as a rule, from jealousy or other causes, are unfriendly to your inventions in their lines, and will resort to all sorts of quibbling methods to cause them to be condemned. It is very safe to conclude that when you have anticipated all of the objections possible for you to anticipate that may be made by one of these especially "wise" men, you will be met with others as frivolous and ridiculous as ingenuity can invent and jealousy conceive.

If this programme is not an immediate success in at least one prominent instance, it may be well for you to personally visit establishments until you secure the adoption of your invention by one, to which you can refer in your correspondence with the others. This adoption will force, as it were, its general adoption, when your success is assured.

PATENT AGENTS AND PATENT BROKERS.

You likely have and will receive circulars and letters from patent agents and patent brokers setting forth their wonderful facilities for the sale of patents, and perhaps

claiming to see in your invention the filling of a "long felt want" for some customer or customers of theirs, and finally winding up with some kind of a proposition and with enclosed power of attorney for your signature. You will likely read of "a certain amount of money to be advanced by you, just to contribute in advertising," or something to that effect.

There was a concern of this kind in Chicago that seemed to do a thriving business, and, I believe, at the expense of many innocent inventors who made advancements of money from time to time as requested, and each advancement "would be all sufficient to effect the expected sale." The sale, however, for different reasons given at different times, did not "come off," and the inventor instead of receiving the expected draft, was continually shown by letters the necessity of making other small advancements.

An acquaintance of mine from Iowa, after having made several remittances, and who was earnestly requested to make another, wrote me with reference to the whole matter and requested that I call on the house in his interest, which I did and wrote him of the swindle. He came on here to "get his money back;" but he was never able to find the "Head Man" in, though an attendant was positive that "his matter was nearly closed," and it was so far as further remittances were concerned.

Experience proves that sales of patents and patent interests in this manner cannot be made advantageously, except perhaps in very exceptional cases, for reasons which we will consider under

INTRODUCING INVENTIONS.

Your invention must be appreciated before reasonable offers for its purchase can be expected, and to be appreciated it must be understood. It is unsafe to assume that

a person skilled in the line of your invention will fully understand it, and if he does, his adverse interests, for reasons already given on page 77, may cause him to keep his good opinion of it to himself. This fact may account for valuable inventions represented in machines and devices being passed unnoticed by judges and all, except in a general way, and may also account for the premium ribbons streaming from the very inferior machines and devices of your competitors.

A well represented mechanical production, possessing but very little merit will, on exhibition, meet with more public favor than a mechanical production possessing the highest degree of merit if poorly represented or not represented at all. It had better not be exhibited than to be represented in an incompetent manner; for it will be assumed that the representative has shown it "for all it is worth," and it will be judged on the basis of this assumption; but if it is not represented no judgment is likely to be passed upon it. In the former case it may be condemned absolutely, while in the latter it may, as we have seen, be passed unnoticed.

Your invention, therefore, must be properly represented in its introduction. This requires a thorough knowledge of it by the exhibitor, combined with a knowledge of the principles, manufacture and operation of similar machines and devices. People judge by comparison; hence your machine or device will be compared with others of its class and the exhibitor must be able to point out the differences intelligently. This requires a knowledge born of experience in the line of your invention. A first-class general mechanic or a first-class business operator, without proper assistance, will be of but little, if any use. You may "stuff" either for the occasion, but a few average questions will lead them from the line of the "stuffing," when their efforts will prove to be failures.

No one is qualified to meet all of the requirements necessary in the introduction of your invention but yourself, and you may not be qualified in a business sense, but in this you can more easily secure competent aid.

TERRITORIAL AND SHOP RIGHTS.

You may have an opportunity to dispose of Territorial Rights and it will be well to consider what bearing the sale may have upon your remaining interests. To bring matters near your home, to be more easily understood, we will assume that you have sold your patent interests in an adjoining county and have given a grant in the usual manner. You find your patented machines in use in your own county, and learn that they were purchased from the purchaser of your patent interests in the adjoining county. You don't like it as it interferes with your trade or prevents you from disposing of your interests in your own county to an advantage. What are you going to do about it? You likely expect that you have an adequate legal remedy, but you have not. The principle is the same with reference to States, and the effect the same if you grant limited shop rights or licenses in the usual manner; so you had better incorporate some qualifications in your papers, which we will consider after having examined the following legal decisions:

The only question presented in this case is: Does the purchaser of a patented article, lawfully manufactured and sold without restriction or condition within his territory by the territorial assignee of a patent right, convey to the purchaser the right to use or sell the article in another territory for which another person has taken an assignment of the patent? When a patented product passes lawfully into the hands of a purchaser without condition or restriction, it is no longer within the monopoly, or under the protection of a patent act,

but outside of it. (*Chaffee v. Boston Belting Co.*, 22 How., 217; *Bloomer v. Millinger*, 1 Wall., 350; *Aiken v. Manchester Print Works*, 2 Cliff., 435.) In *Goodyear v. Beverly Rubber Co.*, 1 Cliff., 348, Mr. Justice Clifford, commenting upon the cases of *Bloomer v. MacQuewan*, 14 How., 549 and *Wilson v. Rousseau*, 4 How., 646, says: "Both of these cases affirm the rule that when the patented machine rightly passes to the hands of a purchaser from the patentee, or from any other person by him authorized to convey it, the machine is no longer within the limits of the monopoly, and is no longer under the peculiar protection granted to patented rights."

It is clear that by such a sale the purchaser acquires an absolute title to the manufactured product which is the subject of a patent, and may deal with it in the same manner as if dealing with any other kind of property. He may use it, repair, improve upon it, or sell it. Subsequent purchasers acquire the same rights as the seller had, and may do with the article or its materials whatever the first purchaser could have lawfully done if he had not parted with the title.

* * * * If this were not so, the purchaser of a manufactured patent article of wearing apparel might be liable for the use of the patented article in every town and city through which he might travel in which there might be an assignee of a district territorial right, although he had purchased it of one having a lawful right to make and sell it, so as to convey an absolute and unrestricted title. *Adams v. Burks*, 1 Holmes, 40; see also *Boyd v. Brown*, 3 McL., 295, where the same points were involved and decided in the same way.

The exclusive rights of a patentee are specially guarded from intrusion; but the contracts which he makes to share them with third persons are interpreted and enforced just as other legal engagements. *Morse, et. al., v. O'Reilly*, 6 Penn., L. J., 501.

Contracts touching the transfer, use, and enjoyment of patented inventions are to be construed in the same way as contracts respecting other species of property, so as to carry into effect the intention of the parties, as collected from the language employed, the subject matter, and the surrounding circumstances. *Star Salt Caster Co. v. Crossman*, 3 B. & A., 281.

A territorial grantee cannot be restrained from advertising and selling within his own territory, even though the purchasers may take the patented articles outside of the vendor's territory. *Hatch v. Hall*, 30 O. G., 1096.

Qualify your grants and licenses by restricting the grantees and licensees in their operations to the exact

territory described in the papers, and provide that no sales shall be made to the trade, or to any other party or parties, in wholesale lots, without an express agreement with the purchasers that the articles shall not be re-sold to be used outside of the specified territory, and also provide that no sales shall be made at retail of the articles to be used outside of the specified territory in any case where the grantees or licensees, as the case may be, or their agents and employes know, or have reason to believe, that their articles are to be so used. If a license, I call your attention to the "provisions" on page 73.

Do not overlook the fact that an established Royalty is held by the courts as being a proper measure of damages in infringement suits. See page 84.

See Infringements, page 93; Assignments, page 88; License, page 85; Royalty, page 83, and

GRANTS.

For a definition of the word "Grant" see under Assignments on page 88, and Rules of Practice, referred to on page 7.

An assignee to the exclusive right under a patent within a particular district can maintain an action for infringement within that district. *Wilson v. Rousseau*, 4 How., 646.

Where the exclusive right to use, rent, and vend to others to use, a patented invention was granted for a specified territory, but not the the right to manufacture, it was held that the grantee (so called) was a mere licensee, and that he could not bring an action for an infringement of the patent in his own name. *Hill v. Henry*, 1 Holmes, 317.

See the next preceding subject "Territorial and Shop Rights," and consider the remarks and decisions thereunder with reference to their bearing on "Grants." See also Licenses, page 85; Infringements, page 93.

ROYALTY.

On page 73, I named several "provisions" which ought to appear in your Royalty contract; but gave no reasons therefor, believing that their importance were too self-evident to require any explanation. On page 77, I wrote "whatever your terms make them the same to all manufacturers," for two important reasons not there given. One of these two reasons you will fully understand after having read the legal decisions under this heading (Royalty) with reference to "an established Royalty being a measure of damages in Infringement suits." The other reason is of commercial importance in the way of fair dealing so necessary to a permanent business success.

Patentees are entitled to but one royalty for patented machines, and consequently when a patentee has himself constructed the machine and sold it, or authorized another to construct and sell it, or to construct and use, and operate it, and the consideration has been paid to him for the right, he has then to that extent parted with his monopoly, and ceased to have any interest whatever in the machine so sold, or so authorized to be constructed and operated. Where such circumstances appear the owner of the machine, whether he built it or purchased it, if he has also acquired the right to use and operate it during the lifetime of the patent, he may continue to use it until it is worn out in spite of any and every extension subsequently obtained by the patentee or his assigns. *Bloomer v. Millinger*, 1 Wall, 340.

Where a patent is apparently valid and in force, the party using it, receiving the benefit of its supposed validity, is liable for royalties agreed to be paid, and cannot set up as a defence the actual invalidity of the patent. * * * * The rule is well settled that in a suit upon a license or contract which contains a covenant on the part of the licensee by which the validity of the patent is admitted, and the licensee has had the benefit of the license, that he is estopped to deny the validity of the patent by setting up anything contrary to the admissions in his contract. *Marsh v. Harris Manfg. Co.*, 22 N. W. Reporter, 516; *Marston v. Swett*, 82 N. Y., 526.

Where certain defendants take a license from a patentee on an agreement to pay certain license fees, so called, and gave a note therefor, the invalidity of the patent was held a good defense to the

note. (*Saxton v. Dodge*, 57 Barb., 84. In harmony with this decision are the cases of *Cross v. Huntley*, 13 Wend., 385; *Head v. Stevens*, 19 Ibid., 411; *McDougall v. Fogg*, 2 Bosw., 387) * * * * A decree of the United States Court * * * * declaring a patent void, is conclusive as between the parties. (*People v. Johnson*, 38 N. Y., 63; *Marsh v. Pier*, 4 Rawle., 273; *Hopkins v. Lee*, 6 Wheat., 109; *Gates v. Preston*, 6 Thomp. & Cook, 530.) *Hawkes v. Swett*, 6 Ibid., 529.

A license to one to use a patented invention in his own proper business does not authorize one to grant a special license and collect royalties thereunder. In the absence of affirmative authority expressly given by the licensee to dispose of the licenses to others, and to allow it to be availed of by others, it must be read as if it forbade a disposition of it to others. *Putnam v. Hollender*, 19 O. G., 1423.

Without an eviction or its equivalent royalties must be paid as per the agreement of parties. *McKay v. Jackman*, 17 Fed. Rep., 641; *White v. Lee*, 14 Fed. Rep., 789.

"I (the Court) am still of the opinion declared in the *National Car Brake Shoe Co. v. Terre Haute, etc. Co.*, 19 Fed. Rep., 514, and *Wescott v. Rude*, Ibid., 830, that evidence of settlement for infringement is not competent to show a license fee or royalty; and upon the same principle a license (for the future) given wholly or partially in consideration of a settlement for infringement is not admissible in evidence against a stranger. *Gottfried v. Crescent Brewing Co.*; *Same v. Hack, et al.*, (Circuit Court, District of Indiana, December 5, 1884,) 22 Fed. Rep., 433.

A Royalty established, constitutes the primary criterion of damages in actions at law (*Burdell v. Denig*, 2 Otto, 716) but in any court this rule can only be applied where there is a fixed and established price at which a license is granted. No price can be said to be fixed, or royalty established, where the patentee varies his price according to the courage or the ability to resist infringers, or where there are other circumstances showing the absence of a fixed and established fee. *Black v. Munson*, 14 Blatch., 265. An established royalty, when one is proved, is unquestionably the safest rule of compensation. *Enigh v. B. & O. R. Co.*, 6 Fed. Rep., 283.

An established royalty is clearly and properly the usual measure of damages in case of articles manufactured and sold. *Star Salt Caster Co. v. Crossman*, 4 B. & A., 566.

Where a license under letters patent provides for the payment of a royalty of \$5.00 a machine, but subject to a reduction of \$3.00 if paid promptly, it will, on the question of assessing damages against a third

party, be considered as establishing a royalty at the lower rate. Where the question is close, a revoked or abandoned license may be considered as throwing light upon the value which an inventor has put upon the right to manufacture his patented machine. Where a patentee does not desire to retain a close monopoly of his invention, the amount of the royalty which he has fixed in his dealings with other parties may be considered as a proper compensation in damages where the character of the infringer does not justify exemplary damages. Agreements made to secure the manufacture and introduction of a patented machine are not to be considered as unqualified licenses fixing a royalty or license fee which can be accepted as establishing within the language of the Court in *Seymour v. McCormick*, 16 How., 480, the average of actual damages sustained by a patentee when his invention is used without license. *Graham v. Geneva Lake Crawford Manfg. Co.*, 32 O. G., 1603.

A royalty or license fee to be binding on a stranger to the licenses which established it must be uniform. Proof of a single license is not sufficient to establish a market price. *Westcott v. Rude*, 27 O. G., 719.

No royalty shall be paid by the United States to anyone of its officers or employes for the use of any patent for the system, or any part thereof mentioned in the preceding section; nor for any such patent in which said officers or employes directly, or indirectly, are interested. Revised Statutes, section 1673. The "preceding section" (1672) reads as follows: "The breech-loading system for muskets and carbines adopted by the Secretary of War, known as 'The Springfield breech-loading system' is the only system to be used by the Ordnance Department in the manufacture of muskets and carbines for the military service."

See Territorial and Shop Rights, page 80; Grants, page 82, and

LICENSES.

For a definition of the word "Licenses" see under Assignments on page 88; also Rules of Practice in the United States Patent Office referred to on page 7.

Every person who purchases of the inventor or discoverer, or with his knowledge and consent constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased without liability therefor. U. S. Revised Statutes, section 4899.

The difference between a license and an assignment was determined by the Supreme Court in *Gaylor v. Wilder*, 10 How., 477, where it was held that an assignment of a patent short of the entire and unqualified monopoly, is a mere license. Curtis, in his work on Patents, sections 212, 213, says that while an assignment vests in the grantee the exclusive right either for the whole country, or for a particular district, of making and using the thing patented, and of granting that right to others, a license is an authority to exercise some of the privileges secured by the patent, but which still leaves an interest in the monopoly in the patentee. * * * Surrender of a license by a part of the licensees does not release the remaining licensees from their obligations under the license. *Theberath v. Celluloid Manfg. Co.*, 3 Fed. Rep., 143.

If a license to use a patented machine be conditional, the conditions must be performed, or there can be no right to the use. The use of the machine under such circumstances is an infringement, and may be enjoined. There is no pretense of right under the license in such a case, and the question must be considered as though no license had been granted. If a defendant justifies under a license, he must show the performance of the conditions of the grant. Equity will direct the cancellation of a contract for fraud or mistake, but it cannot alter the contract. *Brooks v. Stolley*, 3 McL., 523.

Licenses need not be recorded. *Chambers v. Smith*, 5 Fish., P. C., 12.

A mere license is not apportionable so as to permit the licensee to grant to others separate rights to use or work the patent, by subdividing the rights that may have been granted to himself. It is an open question whether a license to a party and his assigns is a personal privilege, or whether it confers the power of assignment in its entirety to third persons. (Curtis on Pat., Sec. 213; *Brooks v. Byam*, 2 Story, 525.) *The Consolidated Fruit Jar Co. v. T. W. Whitney, et al.*, 1 B. & A., 306.

Mere license to a party, without having his assigns or equivalent words to them, saying that it was meant to be assignable, is only the grant of a personal power to the licensee, and is not transferable by him to another. *Oliver v. Rumford Chemical Works*, 109 U. S., 75.

It is familiar learning that the Patent Act of 1836, * * * expressly recognizes the assignment of the whole or any undivided part of a patent, and an assignment of the entire right for any specified part of the United States, and provided that an action for damages against an infringer might be brought against any patentee, assignee, or grantee of the exclusive right: Statutes of 1836, sections 11 and

14, 5 U. S. Statutes at Large, sections 121 and 123. It has been uniformly held that when the interests do not come within this description, but as a license, an action at law must be in the name of the patentee. The leading case is *Gaylor v. Wilder*, 10 How., 477. Judge Shepley has held that the same rule holds good in equity: *Hill v. Whitcomb*, 1 Holmes, 317, or rather that the licensee himself could not maintain the suit alone. He said that the contract was valid, and could probably be enforced in equity against the grantor, and persons trespassing with notice of the contract, but not as a patent suit, and he dismissed the bill, because the jurisdiction of the Circuit Court in that case depended on the suit being maintained under the patent law. This last point has been decided otherwise by the Supreme Court, and by Judge Clifford in this court. Two appeals in equity have been sustained in patent suits between citizens of the same State by an exclusive licensee himself, against the patentee and others jointly trespassing with him knowing of the license. *Littlefield v. Perry*, 21 Wall., 205; *Star Salt Caster Co. v. Crossman*, Cir. Ct. Mass. Dist., May Term, 1878. (Reported in 3 B. & A., 281.) In both these cases the owner of the patent was a defendant, and, of course, could not sue himself. Therefore, the question whether a third person could be thus sued was not touched. I (the Court, Lowell, J.) must adhere to Judge Shepley's decision on that point. *Hammond v. Hunt*, 4 B. & A., 111.

Licensees have no interest capable of affording the foundation of a suit. *Grover & Baker Sewing Machine Co. v. Sloat, et al., In Equity*, 2 Fish., P. C., 112.

A mere licensee cannot sue strangers who infringe. In such case redress is obtained through or in the name of the patentee or his assignee. *Littlefield v. Perry*, 21 Wall., 205.

"It has been uniformly held that the right of action or suit at law, or in equity, thus given by the Statute refers back to section 11 (Act of 1836) and that those persons may bring actions or suits in their own names who are there mentioned, and, in general, that none others may do so. Therefore, a mere licensee cannot maintain an action at law, nor can he, generally speaking, sue in equity, without joining the patentee." *Gaylor v. Wilder*, 10 How., 477; *Blanchard v. Eldridge*, 1 Wall., Jr., 337; *Potter v. Holland*, 4 Blatch., 206; *Sanford v. Messer*, 1 Holmes, 149. The Statute of 1870, which codified the patent laws, adopted a more condensed form of statement. In section 36 (16 Statutes at Large, 203) it says simply the patentee may grant an exclusive right, under his patent to the whole, or any specified part of the United States, instead of the exclusive right to make and

use, and to grant to others to make and use the thing patented; and the same language is found in Revised Statutes, section 4898. But the decisions, again, are uniform that this change of phraseology involves no change in the law. See Paper Bag Cases, 105 U. S., 766; Nelson *v.* McMann, 4 B. & A., 203. * * * * The plaintiff (licensee) will (not) be without remedy if he cannot find the patentee (licensor) or if the patentee is hostile. * * * No doubt there are methods known to a court of equity by which the suit may proceed for the benefit of the only person who is entitled to damages. Wilson *v.* Chickering, et al., 14 Fed. Rep., 919.

Do not overlook the fact that an established Royalty is held by the courts as being a proper measure of damages in infringement suits. See page 84.

For implied licenses see Employer and Employe, page 114. See also Assignments, page 88; Grants, page 28; Territorial and Shop Rights, page 80; Royalty, page 83

ASSIGNMENTS.

"Every patent or any interest therein shall be assignable in law by an instrument in writing; and the patentee or his assigns or legal representatives may, in like manner grant and convey an exclusive right under his patent to the whole or any specified part of the United States. An assignment, grant, or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the patent office within three months from the date thereof." U. S. Revised Statutes, Sec. 4898.

Interests in patents may be vested in assignees, in grantees of exclusive sectional rights and mortgages, and in licenses.

An assignee is a transferee of the whole interest of the original patent, or of an undivided part of such whole interest, extending to every portion of the United States. The assignment must be written or printed and duly signed.

A grantee acquires by the grant the exclusive right, under the patent, to make and use, and to grant to others the right to make and use, the thing patented, within and throughout some specified part of the United States, excluding the patentee therefrom. The grant must be written or printed and duly signed.

A mortgage must be written or printed and duly signed.

A licensee takes an interest less than or different from either of the others. A license may be oral, or written, or printed and duly signed.

An assignment, grant, or conveyance will be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless recorded in the Patent Office within three months from the date thereof.

No instrument will be recorded which does not, in the judgment of the Commissioner, amount to an assignment, grant, mortgage, lien, encumbrance, or license, or affect the title of the patent or invention to which it relates.

Assignments which are made conditional on the performance of certain stipulations, as the payment of money, if recorded in the office, are regarded as absolute assignments, until cancelled with the written consent of both parties, or by the decree of a competent court. The office has no means of determining whether such conditions have been fulfilled.

In every case where it is desired that the patent shall issue to an assignee, the assignment must be recorded in the Patent Office at a date not later than the day on which the final fee is paid. The date of the record is the date of the receipt of the assignment at the office."

See Rules of Practice referred to on page 7.

Assignments of patents are valid as between the parties if they are not recorded, and an assignment to make and sell includes the right to use. *Turnbull v. Weir Plow Co.*, 6 Biss., 225; *Moore v. Marsh*, 7 Wall., 515; *Perry v. Corning*, 7 Blatch., 195.

While an Assignment is one of the most common papers to be executed in relation to Letters Patent, it is the most frequently informal and defective in its execution to carry out the intent of both parties to any transaction. It is necessary for an assignment to have any other effect than a "quit-claim," to carry upon its face on the part of the assignor of the patent a warranty as to his title to the interest he professes to convey.

The form of assignment provided by the Patent Office Rules incurs no liability of any description on the part of the assignor.

An assignment also should be witnessed by two parties.

While this may not be absolutely necessary in every State in the Union, still it is the only evidence of title. There are many conditions under which it has been necessary that the instrument should be witnessed by two parties.

Under the Statutes of New York, the assignment of patents duly acknowledged before a Notary Public are sufficiently proved. *New York Pharmaceutical Association v. Tilden*, 14 Fed. Rep., 740.

Assignments must be wholly in writing, and this condition can under no circumstances be abrogated. U. S. Rev. Stat., Sec. 4898.

Assignments of patents are not required to be under seal, even though the assignment is made by a corporation. The Statute simply provides that "every patent, or any interest therein, shall be assignable in law by an instrument in writing." A corporation may bind itself by a contract not under its corporate seal, when the law does not require the contract to be evidenced by a sealed instrument." *Bank of Columbia v. Patterson*, 7 Cranch., 299; *Fleckner v. Bank of the United States*, 8 Wheat., 338; *Andover, etc., Turnpike Corporation v. Hay*, 7 Mass., 102; *Dunn v. Rector, etc., of St. Andrew's Church*, 14 Johns. (N. Y.), 118; *Kennedy v. Baltimore Ins. Co.*, 3 Har. & J. (Md.), 367; *Stanley v. Hotel Corporation*, 13 (Me.), 51. An assignment by a corporation is executed in the manner required by law, by an agent when making a simple contract in writing for the corporation, and by its authority. The rule as laid down by the authorities is that the agent should, in the body of the contract, name the corporation as the contracting party, and sign as its agent or officer. *Mott v. Hicks*, 1 Cow. (N. Y.), 513. (*Bowen v. Morris*, 2 Taunt., 374; *Shelton v. Darling*, 2 Conn., 435; *Brockway v. Allen*, 17 Wend. (N. Y.), 40.) The attachment of shares of the capital stock of a corporation of a stockholder therein in no way effects the right of the corporation to assign its patent interests. *Gottfried v. Miller*, 14 Otto, 521.

A simple assignment conveys no right of action for past infringements of a patent, and if a simple assignment is made, it leaves in the assignor of the patent, a right of action against all parties, infringers of the patent, even against the assignee himself. *Moore v. Marsh*, 7 Wall., 515.

Inventions may be assigned before they are patented. *Cammeyer v. Newton*, 4 Otto, 225. *Hendrie v. Sayles*, 8 (Ibid.), 546. *Herbert v. Adams*, 4 Mason, 15.

It is an easy matter, however, to express in every assignment by a special clause, a conveyance of all claims for past infringements,

whether of damages or profits, and the rights thus conferred will be carried by the assignment. *Hamilton v. Robbins*, 3 B. & A., 157.

An assignment of an interest in an invention secured by letters patent, is a contract, and like all other contracts is to be construed so as to carry out the intention of the parties to it. * * * * There is no artificial rule in construing a contract, and effect if possible is to be given to every part of it in order to ascertain the meaning of the parties. *Nicolson Pavement Co., v. Jenkins*, 14 Wall., 452; see also *Seymour v. Osborne*, 11 Wall., 516; *Cammeyer v. Newton*, 4 Otto, 225 (*supra*).

An agreement to account and pay a specified royalty contained in an instrument of assignment forms part of the consideration of the assignment, and does not reduce the grantee to the position of a licensee. Neither does the clause of forfeiture for non-performance contained in an assignment, reduce the grantee to the position of a licensee for the non-payment or for non-performance: forfeitures may be enforced as for condition broken, but until it is enforced the title granted remains in the assignee. An assignment of an imperfect invention with all the improvements upon it that the inventor may make is equivalent in equity to an assignment of the perfected results. In such case the assignees become in equity the owners of the patent issued upon the invention when perfected, and, if the assignor takes the legal title, he holds it in trust for them, and should convey. In a contest between an assignor in equity and his assignee, a court of equity will give the same effect to an equitable title that it would to one that was legal. *Littlefield v. Perry*, 7 O. G., 964.

No extension or re-issue of a patent is conveyed by any assignment unless such assignment unequivocally expresses that fact. But assignees using patented machines at the time of a renewal, or an extension of a patent, will have a right to continue their use. *Wilson v. Rossau*, 4 How., 645. *Holmes & Spaulding*, Com. Dec., 4 O. G., 581.

An assignment takes effect from the day of its delivery and not from the day of its date. *Dyer v. Rich*, 1 Metcalf (Mass.), 180.

"Where an assignment of an interest in a patent is made upon a condition subsequent, and not precedent, to the vesting of the interest, the question whether the defeasance has taken effect is for the courts, which have, and not for the Patent Office, which has not the means for its proper adjudication. An assignment of an interest in all patents previously obtained by the assignor, does not convey a subsequent invention of an improvement covered by a patent obtained before the assignment. An instrument purporting to be an assign-

ment of an interest in all letters patent to be subsequently obtained by the assignor embodying improvements on his prior inventions is not an actual transfer of the subsequent patent, but merely an agreement to transfer, enforceable only in a court of equity. Such an instrument does not warrant the issue of the subsequent patents to the assignee as a sole or joint grantee, nor does it entitle him to appear as a party to the proceedings upon the subsequent application in the Patent Office. The clear meaning of a written instrument cannot be changed in the Patent Office by parol proof that the parties intended something else. An interest in an invention cannot be assigned by parol so as to entitle the assignee to appear in the Patent Office and assert the right to become a joint patentee, or to conduct the application in place of the inventor. Parties have no right, by contract, falsely to concede priority of invention; such a concession confers upon the party in whose favor it is made no right to demand a patent as the first and original inventor, whatever rights it may confer on him as an equitable assignee; it is still the duty of the Patent Office to grant the patent to the first and original inventor, or to his assignee, and not to the party who, in defiance of the facts, is conceded to be the first and original inventor. A concession of priority, which is virtually a contract, cannot include an assignee, who, although only entitled to a transfer of the patent after its issue, has, coupled with the interest, a power of attorney from the inventor; but such assignee may be permitted to introduce and examine witnesses, and to interrogate witnesses introduced by the parties, on the question of priority of invention, and also to submit arguments on that question. *Hammond v. Pratt*, 16 U. S., 1235.

Where certain terms are used in a grant which have well-known general meaning, then, in the interpretation of such grant, such well-known general meanings must be given to the terms. * * * * But in giving an interpretation to a particular clause of a deed (or assignment) we must look to every part of it in order to ascertain whether such interpretation is the true one. *Day v. Cary*, 1 Fish., P. C., 424.

Where an invention was misnamed in a conveyance, and where it, on its face, furnished means for correcting the mistake, and for identifying the thing about which the parties intended to contract, held that it was sufficient to pass the title to the invention patented. But if it were otherwise, the deed was not a nullity—it might be reformed in a court of equity. *Harmon v. Bird*, 22 Wend., 112.

Inventions secured by letters patent are property in the holder of the patent, and as such are as much entitled to protection as any other

property consisting of a franchise, during the term for which the franchise or the exclusive right is granted. Such a holder may sell, assign, lease, or give away the property; or enter into any arrangement or agreement respecting the same; not enlarging the right granted, as the same might make with any other personal property. Authorities to support these propositions are not necessary as the statement of them is quite sufficient to secure in their behalf universal assent. *Star Salt Caster Co. v. Crossman*, 3 B. & A., 281.

See Undivided Interests, page 65; Grants, page 82; Licenses, page 85; Employer and Employe, page 114; Priority of Inventions, page 28, and

PARTNERSHIP.

A joint interest in the patent did not make the parties partners [see Undivided Interests, page 65] and some agreement, therefore, became necessary to enable them to work the invention at their joint expense, and for their joint benefit. (*Hindm., on Patents*, 236.) If such an agreement be made they may become partners in the business of manufacturing and vending the patented article, subject to the rules of law governing parties standing in that relation to each other, except as those rules may be modified and limited by the articles of partnership. *Parkhurst v. Kinsman*, 1 Blatch., 488.

In the absence of an agreement the inventions of the member of a firm, if they are brought out and perfected by using the tools, time and money of the firm, with the consent of the inventor—a member of the firm—and if the invention was applied in the business of the firm, the rule applicable to employer and employe will apply with reference to the interest of the firm in such inventions. If machines so manufactured are the property of the firm at the time of dissolution, each member to the extent of his interest, has a right in them as his interests may appear. *Wade v. Metcalf*, 16 Fed. Rep., 130.

See Employer and Employe, page 114; Undivided Interests, page 65.

INFRINGEMENTS.

According to the patent law if a machine involves substantial identity with the one patented, it is an infringement. If the invention of a patentee be a machine it is infringed by a machine which incorporates, in its structure and operation, the substance of the invention, that is an arrangement which performs the same service,

or produces the same effect in the same way, or substantially the same way. * * * * One machine is the same in substance as another, if the principle be the same in both, although the forms may be different. (*Boville v. Moore*, Dav., P. C., 361.) *Sickles v. Borden*, 3 Blatch., 535.

On the question of infringement the burden of proof is upon the plaintiffs to show to the satisfaction of a jury that the machine infringes some one or all the claims of his patent. In determining the question of infringement a jury is not to judge about similarity or differences by the names of things, but are to look to the machine or their several devices or elements, in the light of what they do, or what office or function they perform, and how they perform it; and to find that a thing is substantially the same as another, if it performs substantially the same function or office in the same way to attain the same result; and that things are substantially different when they perform different duties, or in a different way, or produce a different result. For the same reason a jury is not to judge about similarities or differences merely because things are apparently the same, or different, apparently, in shape or form; but the true test of similarity or difference, in making the comparison, is the same in regard to shape or form as in regard to names; and in both cases a jury must look at the mode of operation, or the ways the parts work, and at the result as well as the means by which the result is attained. A jury is to inquire about and consider more particularly those portions of a given part of a machine which really do the work, so as not to attach too much importance to the other portions of the same part which are only used as a convenient method of constructing the entire part. The jury will also regard the substantial equivalent of a thing as being the same as the thing itself, so that, if two machines do the same work in substantially the same way and accomplish substantially the same result, they are the same; and so, if parts of two machines do the same work in substantially the same way and accomplish substantially the same result, those parts are the same, although they may differ in name, form, or shape; but in both cases if the two things perform different work, or in a way substantially different, or do not accomplish substantially the same result, then they are substantially different. Slight differences in degree cannot be regarded as a weight in determining a question of substantial similarity, or substantial difference. One thing may be a little longer or a little shorter than the other, or may work a little better or a little worse, and yet the two may be substantially the same. *Cahoon v. Ring*, 1 Cliff., 592.

The doctrine is simply this, as stated in the opinion of the Supreme Court, that in order to make out the fact of infringement there must appear to have been a substantial identity; that the parts of the machine which are claimed to be an infringement of the patented machine must appear to the satisfaction of the jury to be substantially the same; that is, that the same result must have been produced by substantially the same principle or mode of operation. *Blanchard v. Putnam*, 2 Bond, 84.

Where the invention embraces an entire machine, as a car for a railway, or a sewing machine, * * * * any person is an infringer who without license makes or uses any portion of the machine. Where the invention embraces one or more of the elements of a machine, but not the entire machine, as the coulter of a plough, or the divider of the reaping machine * * * * any person may make, use, or vend all other parts of the machine or implement, and he may employ a coulter or a divider on the machine mentioned provided it be substantially different from that embraced in the patent. Another class of machines are those which embrace both a new element, and a new combination of elements, previously used and well known. The property in the patent in such a case consists in the new element, and in the new combination. No one can lawfully make, use, or vend a machine containing such new element or such new combination. They may make, vend, or use the machine without the patented improvements, if it is capable of such; but they cannot use either of these improvements without making themselves liable as infringers. A fourth class of machines * * * * are those where all the elements of the machine are old, and where the invention consists in the new combination of these elements whereby a new and useful result is obtained. Most of the modern machines are of this (fourth) class, and many of them are of great utility and value. But in this class the invention consists solely in the new combination; and the rule is that the property of the inventor, if duly secured by letters patent, is in all cases exactly commensurate with his invention. Such an invention, however, is an improvement upon an old machine and consequently the patentee cannot treat another as an infringer who has also improved the original machine by the use of a substantially different combination, although the machine may produce the same result. But every inventor is entitled to the full benefit of his invention as described and secured in his patent, and any one charged with infringing the same cannot successfully defend himself against the charge merely because the machine he makes, uses, or vends, differs from that of the complainant's in any respect which does not render

the machine so made, used, or vended, substantially different from the patented machine. *Union Sugar Refinery v. Matthieson & Co.*, 3 Cliff., 639 (Appendix).

A patent for a combination is infringed by the use of a similar combination, although one of the elements is omitted and another substituted for it, unless the substituted device is a new one, or performs a function essentially different, or was not known at the date of the patent as a proper substitute for the one omitted. *Welling v. Rubber Harness Co.*, 7 O. G., 606; *Webster v. New Brunswick Carpet Co.*, 5 O. G., 522.

A patent for a combination, where another part is patented as new, is not infringed by one who uses one, or some, but not all, of the parts. *Sarven v. Hall*, 9 Blatch., 524; 2 Otto, 428.

It is a settled rule of law that where a patent is for a combination of known parts, it is not infringed by the use of any number of the parts less than the whole; for the patent in every such case is for that identical combination and for nothing else, and a combination of any less number of parts is a different thing. This principle has been so often reiterated that it is elementary. There is, however, another class of combinations where some of the parts are new and others old, and where the new parts are claimed as inventions. If the combination is of this character the appropriation of the part which is new is an infringement. (*Prouty v. Ruggles*, 16 Pet., 336; *Lee v. Blandy*, 2 Fish., P. C., 89; *Latta v. Shawk*, 1 Fish., P. C., 465; *Gould v. Rees*, 15 Wall., 187; *Sharp v. Tift*, 18 Blatch., 132; *Vance v. Campbell*, 1 Black, 427; *Gills v. Wells*, 22 Wall., 1; *Burdett v. Estey*, 16 Blatch., 105; *Sanford v. Merrimac Hat Co.*, 4 Cliff., 404; *Fuller v. Yentzer*, 94 U. S., 288; *Moody v. Fiske*, 2 Mason, 112.) *Rowell v. Lindsay*, 10 Biss., 217.

The use of a combination, with something in addition, is an infringement. *Foster v. Moore*, 1 Curt., 279.

Patentees seeking redress for the infringement of their patents must allege and prove that they are the original and first inventors of the alleged improvement, and that the same has been infringed by the party against whom the suit is brought. In the first place the burden to establish both those allegations is upon the party instituting the suit; but the law is well settled that the patent in suit if introduced in evidence affords to the moving party a *prima facie* presumption that the first allegation is proved, the effect of which is to shift the burden of proving the defense upon the defending party. *Blanchard v. Putnam*, 8 Wall., 42; *Seymour v. Osborne*, 11 Ibid., 538. Infringe-

ment being denied the burden of proof is upon the complainant to establish the charge. *Bates v. Coe*, 8 Otto, 31.

There cannot be a patent for a principle; nor for the application of a principle; nor for an effect. Two persons may use the same principle, and produce the same effect by different means without interference or infringement, and each would be entitled to a patent for his own invention. *Bain v. Morse*, 6 Western L. J., 372.

A patentee is bound to disclose in his specifications the best method of working his machine known to him at the time of his application. An infringement will not have taken place unless the invention can be practiced completely by following the specifications. An infringement is a copy made after, and agreeing with the principle laid down in the patent; and if the patent does not fully describe everything that is essential to the making of the thing patented, there will be no infringement by the fresh invention of a process which the patentee has withheld from the public. *Page v. Ferry*, 1 Fish., P. C., 298.

To constitute infringement, there must be, first, similarity of design; second, substantial identity of purpose or result. Similarity of design being established, an infringement occurs if a result incident to the construction of the device is the same as that of the complainant, even though the primary purpose of the construction is for a different object. *Henderson v. Cleveland Co-Operative Stove Co.*, 12 O. G., 4; see *Converse v. Cannon*, 2 Wood, 7; *Wintermute v. Redington*, 1 Fish., P. C., 239. The right of the inventor does not depend upon the question whether the machine is more or less perfect, or whether slight modifications in the arrangement of the machinery, or in the finish of the parts composing it, may or may not better accomplish the end sought to be attained; but upon the question whether the machinery constructed as described in the patent will or will not accomplish the end practically and usefully in the way pointed out. If it will, the inventor is entitled to the protection which the government has granted him, and any one using the principle thus embodied is guilty of an infringement, however he may have perfected the machinery by superior skill in the mechanical arrangement and construction of the parts. Such perfecting is but the skill of the mechanic, not the genius of the inventor. *Parkhurst v. Kinsman*, 1 Blatch., 488.

In some cases the letters patent include only the particular form described and claimed, not for the reason that the patentee has described and claimed that form only, but because the invention consists in form only, and only in that form can be embodied, so that

when the form is not copied the invention is not infringed. *Winans v. Denmead*, 15 How., 343; *Murphy v. Eastham*, 1 Holmes, 113.

The structural difference in form and size is not important in determining the question of infringement if the same work is done by substantially the same means. *Sewing Machine Co. v. Frame*, 24 Fed. Rep., 596.

A mere change of form, the * * * * adoption of some equivalent, suggested by mere mechanical skill—will not prevent an infringement. It would be otherwise if the change were one of substance, and requiring exercise of inventive power. *Case v. Brown*, 2 Fish., P. C., 268; *Ibid.*, 2 Wall., 320.

Except where form is the essence of the invention, it has but little weight in determining the question of infringement. *Machine Co. v. Murphy*, 7 Otto, 120.

Substantial identity is that which comprehends the application of the principle of the invention. If a party adopts a different mode of carrying the same principle into effect, and the principle admits of different forms, there is an identity of principle though not of mode (*Page v. Ferry*, 1 Fish., P. C., 298), and it makes no matter what additions to, or modifications of, a patentee's invention a defendant may have made; if he has taken what belongs to the patentee, he has infringed, although with his improvement the original machine or device may be much more useful. (*Howe v. Morton*, 1 Fish., P. C., 586.) All modes, however changed in form, but which act on the same principle and effect the same end, are within the patent; otherwise a patent might be avoided by any one who possessed ordinary mechanical skill. *McComb v. Brodie*, 1 Wood, 153.

A patent for several distinct improvements which are clearly specified is infringed by the use of one of the improvements. *Moody v. Fiske*, 2 Mason, 112.

The use of a part of a patent covering an apparatus is an infringement, although the other part is not used. *Matthews v. Spangenberg*, 15 Fed. Rep., 813.

Where two machines are for one purpose, covered by one patent, the patent is infringed by the use of either machine. *Wyeth v. Stone*, 1 Story, 273.

There can be no question that there may be a claim for two inventions in the same patent if they both relate to the same machine or structure, and an action can be sustained for the infringement of either one or the other of these separate inventions when claimed as separate and distinct in their character. (*Lee v. Blandy*, 2 Fish., P. C., 92; *Electric Telegraph Co., v. Brett & Little*, 4 E. Law and Equity

Reports, 347; Norman on Pats., 108, 109.) McComb, et al., *v. Brodie*, 1 Wood, 153.

The use merely for experiment, and not with a view to profit, and when there has been no profit and no sale, will not make a party liable for infringement because a patentee would not be injured by it, but where * * * * it is done as a matter of business, where the product of that experiment has been thrown into the market to compete with the products of the patentee, although it may be called an experiment, yet if it is a matter of business, and thrown into the market for the purpose of being sold, and is sold, that will be such a use as will make a party liable to an infringement. *Poppenhusen v. New York Gutta Percha Co.*, 2 Fish., P. C., 62.

The general principle is well settled that the making and selling of the separate materials for a patented combination is not an infringement of the rights of the inventor. *Prouty v. Ruggles*, 16 Pet., 336; *Byane v. Farr*, 1 Curtis, C. C., 260; *Foster v. Moore*, *Ibid.*, 279; *Vance v. Campbell*, 1 Black, 427; *Eanes v. Godfrey*, 1 Wall., 78, and numerous subsequent decisions settle that point. True, there is an obvious exception to this rule. If two or more persons conspire, one to make one part of a patented combination, and another another part, with the intention that the parts should be afterwards put together—this is an infringement. But in order to render one who makes and sells parts of a patented combination liable for infringement, the parts manufactured must be useless in any other machine, and they must be sold and manufactured with the understanding or intention that the remaining parts are to be supplied by another, and the whole then combined for use. Such is the doctrine of the leading case of *Wallace v. Holmes*, 9 Blatch., 65, which was the case of a lamp burner, wholly useless unless combined with the glass chimney intended to be used with it. *Millner v. Schofield*, 4 Hughes, 258.

The conditions of a license must be performed or there will be no right to use the patented machine, and if the conditions are not performed the use will be an infringement. Where there is no pretence of right under a license because of non-performance of its conditions, the case will be decided as though no license had ever been granted. *Brooks & Morris v. Stolley*, 3 McL., 523.

Although a United States patent gives no protection in the sale of machines in foreign countries, it gives protection in the United States for making machines in the United States to be sold abroad. *Ketchum Harvester Co. v. Johnson Harvester Co.*, 19 Blatch., 367.

See Joinder of Inventions, page 34; Combinations, page 37;

Equivalents, page 40; Defeating Patents, page 43; Identity, page 102; Licenses, page 85; Substantially, etc., page 39, and

INFRINGERS.

Where the complainant is first in the field of an invention the defendant infringes if he follows the complainant's leading idea as set forth in his patent. *Hoe v. Cole*, 13 O. G., 500.

If the complainant be the original inventor of the divider, he will have a right to treat as infringers all who make dividers operating upon the same principle, and performing the same functions by analogous means, or equivalent combinations. *McCormick v. Talcott*, 20 How., 405; *Myers v. Duker*, 1 B. & A., 535.

Where an invention is described as consisting of the combination of two elements, and one of them proves defective, or is not used by the infringer, he will, nevertheless, be restrained from using the remaining one, if the patentee has included it in a separate claim. *Henderson v. Cleveland Co-Operative Stove Co.*, 12 O. G., 4.

If a patentee has invented a combination of two or more old things so as to produce a new and useful result, then he has a right to treat as infringers all who have used his invention in order to accomplish something more, or better, when, without the aid of such invention it could not be effected. *Sayles v. Chicago & Northwestern R. R. Co.*, 3 Biss., 52.

The defendants, though they manufactured only one part of the combination covered in the patent, are, nevertheless, infringers, if it appears that such parts were made and sold for the express use to which they were put. *Richardson v. Noyes*, 10 O. G., 507.

The manufacturing and selling of elements of a combination which cannot be used in any other way is *prima facie* evidence of an intent to infringe the patent. *Schneider v. Pountney*, 21 Fed. Rep., 399.

It is well settled that any material changes, or the substitution of mechanical equivalents, will not relieve a party from the charge of infringement. *Brighton v. Wilson*, 18 Fed. Rep., 378.

The original inventor of a machine will have a right to treat as infringers all who make machines operating on the same principle, and performing the same functions by analogous means, or equivalent combinations, even though the infringing machines may be an improvement on the original, and patentable as such. *McCormick v. Talcott*, 20 How., 405.

If all the defendants have participated in the infringement they

are all liable, though the individuals were acting simply as officers of the company in doing it. * * * * A man cannot retreat behind a corporation and escape liability for a tort in which he actively participates. *National Car Brake Shoe Co. v. Terry Car & Manufacturing Co.*, 19 Fed. Rep., 514.

A wrong doer cannot set up that he is doing wrong on account of a third person as a bar to his own responsibility. The principal also may be liable if the injured party elects to look to him; but the person who is actually doing wrong cannot escape liability. The fact of the defendant selling the article infringing the patent, as agent, and having no interest in it, or in its sale, does not release him from the consequences of infringement. *Maltby v. Angus*, 14 Blatch., 53.

If it is shown that a party has formally been engaged in infringing a patent, and ceased doing so at the commencement of the action, and did not propose to re-engage in the business, it is a sufficient answer to an application for an injunction made to prevent a renewal of the infringement. *Potter v. Crowell*, 1 Abbott, 89.

The defendant seeks to defend himself against an action for an alleged infringement, both as to the making and using, by showing that he has done so by authority of the company employing him. But the unlicensed manufacture and use are mere torts * * * * for which an agent is directly and personally answerable. Story on Agency, Secs. 311, 312, and cases there cited. *Perkins v. Smith*, 1 Wils., 328; *Stephens v. Elwell*, 4 Maule & S., 259. These cases are selected because the acts for which the agents are personally charged were simply torts without fraud. Cases bearing specially upon the defendant's case as a director of the company are: (*Salmon v. Richardson*, 30 Conn., 360; 1 Chitty on Plead., 81 to 83; *Bell v. Josselyn*, 3 Gray, 311. 2 Greenl. Ev., Sec. 68; *Commonwealth v. Ohio*, etc., Railroad, 1 Grant, 329; *Calhoun v. Richardson*, 30 Conn., 210.) [See also a similar opinion—*Bryce v. Dorr*, 3 McL., 582.] *Lightner v. Brooks*, 2 Cliff., 287.

There can be no question that if the contractor, in the fulfillment of his obligation violates the patent right of another, he is answerable for the infringement. He cannot defend himself against the claim of the patentee by asserting that he committed the wrong under a contract with the County Commissioners. It was his own folly to have imposed upon himself such an obligation, and he alone is responsible for the injury which another may sustain as the consequences. If he had foreknowledge that the work he had bound himself to perform involved an infringement of a patent right, it was his business to have procured a license for the use of the improvement: and failing to do

so, he takes on himself the responsibility of a violation of the patent. *Jacob v. Commissioners of Hamilton County*, 1 Bond, 500.

A defendant corporation having violated the conditions of a contract under which a license to manufacture and sell a patented device was granted, and the license having therefore been revoked by the licensor under a provision of the contract, in a suit for infringement against such corporation after the revocation, a plea setting up the defense was overruled. When a license has been revoked by a complainant, and a defendant is sued as a naked infringer, he is at liberty to avail himself of any defense ordinarily open to a defendant charged with infringement. 23 O. G., 2513.

The keeper of an hotel who uses a patented hotel register is liable as an infringer. He is not the less liable although he did not intend to violate the rights of the patentee, and desisted when notified. *Hawes v. Washburne*, 5 O. G. 491.

An infringer cannot successfully defend himself against a charge by the allegation and proof that his machine is not as good as that of the inventor whose rights he has invaded. The rights of an inventor are oftentimes affected as injuriously by the sale of poor machines in the market, as by those made more strictly in conformity to his patent. *Roberts v. Harnden*, 2 Cliff., 500.

See Equivalents, page 40; Combinations, page 37; Identity, page 102; Infringements, page 93; Jurisdiction, page 108; Licenses, page 85 and

IDENTITY.

To constitute identity of invention, and therefore, infringement, not only must the result attained be the same, but in case the means used for its attainment is a combination of known elements, the elements combined in both cases must be the same and combined in the same way, so that each element shall perform the same function; provided, however, that the differences alleged are not merely colorable, according to the rule forbidding the use of known equivalents. *Electric Signal Co. v. Hall*, 6 Fed. Rep., 603.

If the same effects are produced by two machines by the same mode of operation, the principles of each are the same. If the same effects are produced, but by combinations of machines operating substantially in a different manner, the principles are different. *Whittemore v. Cutter*, 1 Gall., 478.

Substantial identity is identity of principle. * * * * This principle may be used without an exact identity, by mechanical equiv-

alents or contrivances, and if so there would be a substantial identity
Page v. Ferry, 1 Fish., P. C. 298.

“Substantial identity” is where the parts of two machines are substantially the same; that is, the same result must be produced by substantially the same principle or mode of operation. If there is a difference in this respect then it goes to establish the want of identity between the structures. *Blanchard v. Putnam*, 2 Bond, 84.

Substantial identity is a question of fact which the jury must determine. *Many v. Jagger*, 1 Blatch., 372

Characteristic resemblance is the fairest test of substantial identity. *Union Paper Collar Co. v. Henry J. White*, 7 O. G., 877.

The law applicable to identity is so well settled and understood that it is useless to extend this opinion (of the Court) by the formal citation of authorities. It is a conceded principle that a patent for a mechanical structure, or a process to effect a specific purpose, does not embrace every possible means of effecting the same result. The true inquiry is whether the machine or process charged to be an invasion of an exclusive right of a patentee embodies the idea or conception of the original inventor, and accomplishes it by substantially the same means. The patentee is protected from the use of all plans or devices, which, however, seemingly different from the patented invention, are the same in principle and operation. *Whitney v. Mowry*, 2 Bond, 45.

See Infringements, page 93; Defeating Patents, page 43.

VALIDITY OF PATENTS.

The patent itself is *prima facie* evidence of validity and original inventorship. *South v. Goodyear Dental Vul. Co.*, 93 U. S., 486; *Rich v. Lippincott*, 2 Fish., P. C., 1.

The patent is evidence of its own validity, and hence the burden of proof to invalidate it rests upon the defendants. Every reasonable doubt ought to be resolved against them. *Miller v. Force*, 9 Fed. Rep., 603.

It is not material to the validity of a patent if it has become useless since the patent was issued, by the discovery of some other method which dispenses with it. If the invention was useful when the patent was issued, the patent is valid. *Poppenhusen v. New York Gutta Percha Comb Co.*, 2 Fish., P. C., 62.

In all doubtful cases involving the validity of a patent, the fact that a mode described in the patent has gone into extensive use has, and often will, induce the courts to decide in favor of the patent. But, while this is so, courts ought not, merely because of such use, to sustain a patent. The rights of the public are to be protected as well as those of individuals, and a monopoly should not be allowed unless the right to it is clearly shown. *Wilson Packing Co. v. Chicago Packing & Provision Co.*, 10 Biss., 559.

Where defendants deny infringement and set up the right to manufacture the article patented sufficiently to put the plaintiff to proof of the patent alleged in the bill, that proof may be met by any proof on the part of the defendants which will tend to show there was no valid patent. *Eagleton Mfg. Co. v. West, Bradley & Cary Mfg. Co.*, 18 Blatch., 218.

Where the validity of a patent has been sustained by judgments of other Circuit Courts, the respect due to these judgments, and the importance of consistency and uniformity of decisions in courts of co-ordinate jurisdiction, where the same subject matter is involved, will cause a court to decide in accordance with such judgments. *American Ballast Log Co. v. Cotter*, 11 Fed. Rep., 728.

Two patents of a kind may both be valid where the second is an improvement upon the first, in which event, if the second includes the first, neither can lawfully use that of the other without the other's consent. Plainly the second patent could not be used without the consent of the owner of the first, nor could the owner of the first use the second without the consent of the owner, as the patent contains an invention which the owner of the first patent never made. *Woodworth v. Rogers*, 3 W & M., 120; *Star Salt Caster Co. v. Crossman*, 3 B. & A., 281.

It is not necessary to the validity of a patent that the patentee should take the oath prescribed by law before the letters patent are granted. *Dyer v. Rich*, 1 Metcalf (Mass.), 180.

See Defeating Patents, page 43; Infringements, page 93 and

VOID PATENTS.

If the patent is broader than the invention, if not sufficiently descriptive, taken in connection with the specifications, etc., the plaintiff cannot recover. But though the patent is too broad in its general terms it will be limited by a disclaimer. *Whitney v. Emmett*, 1 Bald., 303.

If there be a false suggestion in any of the several material facts

set forth in a specification the patent is invalid. *Delano v. Scott*, Gilp., 489.

It is necessary to the validity of a patent, that the specification should describe in what the improvement consists; so decided by Mr. Justice Story in the cases referred to in the appendix to 3 Wheaton's Reports, and in the cases of *Boulton v. Bull*; *Boville v. Poor*; *McFarlane v. Price*; *Harmer v. Payne* and others. The reasons upon which this doctrine is founded are to guard the public against any unintentional infringement of the patent during its continuance, and to enable an artist to make the improvement by reference to some known and certain authority to be found among the records of the office of the Secretary of State after the patent has run out. * * * The full nature and extent of the improvement must be stated in the specifications, and the claims must be limited to the improvement, and not include the whole machine, as a patent which is broader than the invention is void. *Evans v. Eaton*, 7 Wheat., 355.

When the claim expresses a combination of several elements, without particularly pointing out the special construction of one embodying the actual novelty and invention, and the general combination is old, the patent is broader than the actual invention, and is therefore invalid. *Terry Clock Co. v. New Haven Clock Co.*, 17 O. G., 908

Where an invention is so loosely and inaccurately described in the specifications that the Court cannot, without resorting to conjecture, gather what it is, then the patent is void; but if the Court can clearly see the nature and extent of the claim, however imperfectly and unartificially it may be expressed, the patent is good. *Ames v. Howard*, I Sumn., 482. See also *Barrett v. Hall*, 1 Mason, 447.

Whether the thing claimed to be invented is sufficiently described, is a matter for the determination of the court or jury. In its nature it is a question of law for it depends upon the construction of a written instrument. If technical terms be used, peculiar to mechanics, in describing the invention, evidence may be heard in explanation of those terms, and in such case a jury may be necessary. If this point were ordinarily referable to the jury, the decisions on the same instrument would be as variable as the names of the parties. To produce uniformity of decisions the courts must give a construction to all written instruments. In this mode, by the application of known rules of construction, the specifications of a patent are construed and settled as regards the thing invented. Whether the description is so particular as to enable a mechanic to construct the machine is a question for the jury. But unless the thing claimed to be invented, is so described as to be known, in the language of the Statute, from every

other thing, the patent is void. And this must be determined by the Court. * * * * Where an improvement on a machine referred to the previous patent of the machine, as showing the part invented, it was held sufficient. *Harmer v. Playne*, 11 East., 101. It is not enough that the thing designed to be embraced by the patent should be made apparent on the trial by a comparison of the new with the old machine; *Dixon v. Moyor* (4 Wash., 68). The specifications must be complete. No defects can be obviated by extraneous evidence at the trial. *Brooks v. Jenkins*, 3 McL., 432.

If with a fraudulent purpose of concealing the invention, or any material part of it, a patentee omits, or erroneously describes any essential element, the patent is absolutely void. *Whitney v. Mowry*, 2 Bond, 45. So, too, if an invention fails to produce the described results the patent is void. *O'Reilly v. Morse*, 15 How., 62.

The validity of the patent in this country does not at all depend upon the validity of a patent on the same invention in a foreign country, but the duration of a patent may. *Cornely v. Marckwald*, 17 Fed. Rep., 83. See Foreign Patents, page 122.

One invention may include within it many other inventions and the patents on each and all may be valid at the same time. This only consequence follows: That each inventor is precluded from using inventions made and patented prior to his own, except by license from the owners thereof. His invention and his patent are equally entitled to protection from infringement as if they were independent from any connection with them. *Cochrane v. Deener*, 4 Otto, 780.

The proceedings in the Patent Office upon the plaintiff's application for the patent are not admissible for the purpose of giving it a different construction. If the defendant claims that the patent is void for uncertainty it rests with him to establish the charge. The patent is not void for want of utility if the invention possesses it (utility) in any measure, however slight. *Westlake v. Carter*, 4 O. G., 636.

An article made according to a known method may be better than other articles made in the same manner, on account of its superior mechanism. But this is no foundation of an exclusive right. And if a material not before used in the same structure be used, that gives no claim to a patent, though the article be more valuable than any other of the kind. * * * * The material being in common use, and no other ingenuity or skill being necessary to construct the article than that of an ordinary mechanic acquainted with the business, the patent is void. *Hotchkiss v. Greenwood*, 4 McL., 456.

See Validity of Patents, page 103; Infringements, page 93; Defeating Patents, page 43.

INJUNCTIONS.

The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of Courts of Equity, to prevent the violation of any right secured by patent, on such terms as the Court may deem reasonable, and upon a decree being rendered in any such case for an infringement, the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby; and the Court shall assess the same, or cause the same to be assessed under its direction. And the Court shall have the same power to increase such damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass on the case. U. S. Revised Statutes, Sec. 4921. See Damages and Profits, page 112.

This section will be found in the pamphlet of patent laws referred to on page 7, and printed therewith are references to many adjudicated cases under it.

"The proof on the application for a preliminary injunction was to the effect that the complainant, the owner of this patent, had never used it, and never constructed a printing press with the Crowell device. The argument is that the owner of this patent was a very large manufacturer of printing presses, but that he did not manufacture and keep the printing presses in stock, only made them to order; and that they have received no order as yet to make a press containing the Crowell device. The question therefore arises whether the Court will grant an injunction in favor of the owner of the patent who has not, after a reasonable time, put it into use, against another who is using it. I (the Court) think, under a patent which gives a patentee a monopoly, he is bound either to use the patent himself or allow others to use it on reasonable or equitable terms, and as I refused an injunction on the motion before the hearing, I shall refuse an injunction in the interlocutory decree, and allow the defendants to continue to use the patent on their giving bond, as they have heretofore." *Hoe v. Knap*, 27 Fed. Rep., 204.

See Infringers, page 100; Infringements, page 93; Patent Applied For, page 44.

JURISDICTION.

The Circuit Courts shall have original jurisdiction as follows:

* * * * *

Ninth. Of all suits at law or in equity arising under the patent or copyright laws of the United States. U. S. Revised Statutes, Sec. 629.

The Supreme Court shall have appellate jurisdiction in the cases hereinafter specially provided for. * * * * U. S. Revised Statutes, Sec. 690.

A writ of error may be allowed to review any final judgment at law, and an appeal shall be allowed from any final decree in equity hereinafter mentioned, without regard to the sum or value in dispute:

First. Any final judgment at law, or final decree in equity or any Circuit Court, or of any District Court acting as a Circuit Court, or of the Supreme Court of the District of Columbia, or of any territory, in any case touching patents—rights, or copyrights. U. S. Revised Statutes, Sec. 699.

The jurisdiction vested in the Courts of the United States in the cases of proceedings hereinafter mentioned, shall be exclusive of the courts of the several States.

* * * * *

Fifth. Of all cases arising under the patent—right, or copyright —laws of the United States. U. S. Revised Statutes, Sec. 711.

Although in ordinary actions at common law brought in the United States Courts the Statutes of limitation of the State where the suit is brought may be pleaded in bar under the provisions of the judiciary act, such pleadings will not apply to an action for the infringement of a patent where the right of action is exclusively under the Constitution and Laws of the United States, and when the form of the remedy is prescribed by the Acts of Congress, and when the Circuit Courts are clothed by statute with exclusive jurisdiction over the whole matter. *Anthony v. Carroll*, 9 O. G., 199.

The statutes of foreign countries, as construed by their judicial departments, will be accepted as law by our courts when considered by them. *Refrigerating Co. v. Gillett, et al.*, 20 Fed. Rep., 192.

The Courts of the United States have their jurisdiction over controversies in patent matters by statute, and do not exercise it merely as ancillary to a court of law. *Blank v. Manufacturing Co.*, 3 Wall., Jr., 196. The courts may render a final decree on a patent whose

validity is contested; without sending the parties to law to try their rights. *Batten v. Silliman*, *Ibid.*, 124.

It is undoubtedly true that the State Courts have no cognizance of actions in which the validity of letters patent are involved. The jurisdiction of the courts of the United States is exclusive for such questions; where, however, the controversy does not turn upon letters patent, but upon the force and effect of some contract under them, or in reference to them, in which the question of their validity is not raised, it has long been held that the State Courts are the appropriate tribunals for the adjudication, and that the Federal Courts cannot properly assert jurisdiction unless the residence or citizenship of the parties confer it. Thus, in the case of *Wilson v. Sandford, et al.*, 10 How., 99, where a bill had been filed in the Circuit Court of the United States for the District of Louisiana to set aside a contract between the appellant and the appellee, by which the former had granted to the latter permission to use, or vend to others to be used, one of Woodworth's planing machines, and to obtain an injunction against the further use of the machine on the ground that it was an infringement of his patent right. The jurisdiction of the Supreme Court on the appeal depended upon the question whether the action arose "under any law of the United States granting or confirming to inventors the exclusive right to their inventions or discoveries." The opinion of the Court dismissing the appeal was delivered by Chief Justice Taney, in which he says: "The dispute in this case does not arise under any act of Congress; nor does the decision depend upon the construction of any law in relation to patents. It arises out of the contract stated in the bill; and there is no Act of Congress providing or regulating contracts of this kind. The rights of the parties depend altogether upon common law and equity principles. The object of the bill is to have this contract set aside and declared to be forfeited; and the prayer is that the appellant's reinvestiture of title to the license 'under the patent' granted to the appellees by reason of the forfeiture of the contract, may be sanctioned by the Court, and for an injunction. But the injunction he asked for is to be the consequence of the decree of the Court sanctioning the forfeiture. He alleges no ground for an injunction unless the contract is set aside. And if the case made in the bill was a fit one for relief in equity, it is very clear that whether the contract ought to be declared forfeited or not in a Court of Chancery depended altogether upon the rules and principles of equity, and in no degree whatever upon any Act of Congress concerning patent rights." And to the same effect, also, was the opinion of Mr.

Justice Nelson, in *Goodyear v. Day*, 1 Blatch., 565. The pleadings in suit * * * * present no issue in regard to the validity of the patent. The only question is as to the validity of certain transfers and assignments of interests in and under them, of which the above cases being authority—the court (State) has jurisdiction. *Consolidated Fruit Jar Co. v. Whitney*, 2 B. & A., 30.

It can make no difference whether the payee of the note or the licensor in the license brings the suit to enforce the note or the license, or whether the suit is brought by the maker of the note, or the licensor in the license to cancel the instrument. The State Court has jurisdiction in either case to inquire collaterally into the validity of a patent, * * * * but it cannot entertain jurisdiction of a contract suit to repeal a patent. *Merserole v. Union Paper Collar Co.*, 6 Blatch., 356.

Where a person was a territorial assignee of a patent for a specified territory, the machine sold by him passed out of the monopoly; the royalty of the patentee had been paid, and the property sold passed from under the protection of the Patent Laws of the United States, and was subject, like other property, only to the operation of the laws of the State. (*Bloomer v. McQuewan*, 14 How., 549; *Wilson v. Rousseau*, 4 How., 646; *Chaffee v. Boston Belting Co.*, 22 How., 217; *Goodyear v. Beverly Rubber Co.*, 1 Cliff., 348). The same principle has been affirmed in this Court (U. S. Circuit) in the case of *Adams v. Burk*, reported in 1 Holmes, 40; 1 O. G., 282; 4 Fish, P. C., 392. *Hawley v. Mitchell*, 1 Holmes, 42. See also *Patterson v. Kentucky*, 97 U. S., 501 (7 Otto).

"Any person who may take any obligation in writing for which any patent right, or right claimed by him or her to be a patent right, shall form the whole or part of the consideration, shall, before it is signed by the maker or makers, insert in the body of said written obligation, above the signature, of said maker or makers, in legible writing or print, the words 'given for a patent right.'" Revised Statutes of the State of Indiana, Sec. 6055 (1881). "This (the above) law is, I (the Court) think, clearly unconstitutional. It was so held in respect to similar laws, in *Helm v. First Nat. Bank*, 43 Ind., 167; following the decision in *ex parte Robinson* (*infra*). See also *Grover & Baker S. M. Co. v. Butler*, 53 Ind., 454; *Fry v. State*, 63 Ind., 552; *Toledo Agr. Works v. Works*, 70 Ind., 253. It is claimed that these cases are inconsistent with the opinion of the Supreme Court of the United States in *Patterson v. Kentucky*, 97 U. S., 501 (*supra*). But that case has reference to local restrictions upon the sale or use of tangible property; and notwithstanding the property was manufac-

tured or produced under letters patent, it was held that the enforcement of the statute of the State interfered with no right conferred by the letters patent. The case manifestly has no application here; the notes in suit having been given, not for tangible property, but for a right in letters patent, in respect to which the States can impose no restrictions. *Castle v. Hutchinson*, 25 Fed. Rep., 394.

Opinion of DAVIS, J. * * * * "This is an attempt on the part of the Legislature (of the State of Indiana) to direct the manner in which patent rights shall be sold in the State ; to proscribe their sale altogether if these directions are not complied with, and to throw burdens on the owners of this species of property which Congress has not seen fit to impose upon them. * * * * It is clear that this kind of legislation is unauthorized. To Congress is given by the Constitution the power "to promote the progress of science and useful arts by securing, for limited times, to authors and inventors, the exclusive rights of their respective writings and discoveries". This power has been exercised by Congress who has directed the manner in which patents shall be obtained, and when obtained how they shall be assigned and sold. The property in inventions exists by virtue of the laws of Congress and no State has a right to interfere with its enjoyment, or to annex conditions to the grant. If the patentee complies with the law of Congress on this subject he has a right to go into the open market anywhere within the United States and sell his property. If this were not so, it is easy to see that a State could impose terms which would result in a prohibition of the sale of this species of property within its borders, and in this way nullify the laws of Congress, which regulate its transfer and destroys the power conferred upon Congress by the Constitution. The law in question attempts to punish by fine and imprisonment a patentee, for doing with property what the National Legislature has authorized him to do, and is therefore void. *Ex parte Robinson*, 2 Biss. 309; *Ibid.*, 4 Fish. P. C., 186.

The right conferred by the patent laws of the United States to inventors to sell their inventions and discoveries does not take the tangible property, in which the invention or discovery may be exhibited or carried into effect from the operation of the tax and license laws of the State, * * * * and it is only the right to the invention or discovery—the incorporeal right—which the State cannot interfere with. Congress never intended that the patent laws should displace the police powers of the State, meaning by that term those powers by which the health, good order, peace, and general welfare of the community are promoted. Whatever rights are secured to inventors must be enjoyed in subordination to this general authority of

the State over all property within its limits. These views find support in the language of this court (Superior) in *Patterson v. Kentucky*, 97 U. S., 501. (Cited *supra*) *Webber v. Virginia*, 13 Otto, 344.

See *Insolvency*, page 114; *Patent Applied For*, page 44.

DAMAGES AND PROFITS.

The profits of the manufacture, sale or use of anything but the patented improvement in the machine cannot be recovered. *Schillinger v. Gunther*, 15 Blatch., 303.

In cases where a patentee avails himself of his invention and of his exclusive right of his enjoyment to its profits, by putting it into market and selling rights under it, as is most usually the case with inventors—that is, rights for States or counties or smaller districts, or portions of the invention itself—in such cases the customary charge for the right to use the patented invention is the measure of the damages which the patentee is entitled to recover in case of an infringement, with interest on the same from the time of the infringement. In other words, if he is accustomed to sell a single right for the manufacture of a machine for 20, 30, 40, 50, or 100 dollars, and if that is his usual price for the right throughout the country, that fee, with interest from the time of the particular infringement, is the measure of damages for each infringement. But if the patentee comes to the conclusion not to vend to others his rights under the patent, and not to avail himself of the proceeds of sales of his mere patent right, but to use the patented invention exclusively himself, and to furnish the products to the community himself out of his own manufacture or establishment—in such cases a different measure of damages is to be adopted by the jury. And that is this: If the patent is for a machine, an entire machine, the patentee is entitled, as damages, in case of an infringement, to the profits he could have made in constructing and vending his machine, over and above the mere profits arising out of its manufacture. By that, we mean the mere profits of its mechanical construction, and not the profits that grow out of the exclusive right to manufacture the invention under the patent. The latter belong to the patentee, while the former, the mere mechanical profits, are excluded from the damages. And if the case is one of importance, on a machine, then he is entitled, as a measure of damages, to all the advantages of the use of his patented

improvement, excluding the profits of the manufacture, and excluding also the value, if any, of the use of the old machine. Now, so far as respects the benefits and advantages that a patentee would derive from an improvement on a machine * * * that would depend very much, if not altogether, upon the usefulness of the machine with that improvement, compared with its usefulness without that improvement. * * * If the machine stripped of * * * improvements would be a useless article in the market, and if no person would buy it unless those improvements were annexed, then its value, so far as its utility is concerned, depends upon those improvements; because they give it vitality and usefulness in the eye of the business community. Hence it is proper to make this discrimination in canvassing the facts bearing upon the proper measure of damages. *McCormick v. Seymour*, 3 Blatch., 209.

The profits are not all that an infringer made in the business in which he used the patented invention, but they are the worth of the advantages he obtained by such use—or, in other words, they are the fruits of that advantage. (*Mowry v. Whitney*, 14 Wall., 651.) Thus, where no profits actually resulted from the use by reason of the defective mechanism in combination with which the infringed device was employed; yet, as the loss was less than it would have been with the infringed device omitted, this benefit is equivalent to an equal gain, and was rightly estimated as a part of the profits for which the infringer was responsible. *Ivers v. Conover*, 11 O. G., 1111.

The general rule is that the plaintiff, when he has established a right to recover, is entitled to all the actual damages which he has sustained in consequence of the infringement of his patent, as contradistinguished from exemplary, vindictive and punitive damages.

* * * One mode of arriving at the actual damages is to ascertain the profits which the plaintiff derives from the machine which he manufactures and sells, and which have been made and sold by the defendant. * * * Another mode * * * is to ascertain the profits which the party infringing has derived from the use of the invention or the construction of the machine. *Pitts v. Hall*, 1 Fish., P. R., 451.

Do not overlook the fact that an established Royalty is held by the courts as being a proper measure of damages in infringement suits. See page 84.

See Royalty, page 83; Licenses, page 85; Injunctions, page 107.

INSOLVENCY.

"These incorporeal rights (copyrights and letters patent) do not exist in any particular State or district: they are co extensive with the United States. There is nothing in the Act of Congress, or in the nature of the rights themselves, to give them locality anywhere so as to subject them to the process of courts having jurisdiction, limited by the lines of States and Territories. *Stevens v. Gladding*, 17 How., 451. * * * * Without such a conveyance as the statute of the United States contemplates, we (the Court) do not think the assignee acquires any legal title to any interest the debtor may have in any letters patent. To invest the assignee with the legal title the Court must compel a transfer in conformity with the requirements of the patent act. *Stephens v. Cady*, 14 How., 530.' *Ashcroft v. Walworth*, 1 Holmes, 152; *Gordon v. Anthony*, 16 Blatch., 234.

The provisions of the Bankrupt Law not only vested the title to patent rights which the bankrupt had, in the assignee, but all rights in equity and choses in action which would cover the whole. (U. S. Revised Statutes, Sec. 5046.) And these rights vested by operation of law in the assignee in bankruptcy at the time of the assignment. *Prime v. Brandon Mfg. Co.*, 16 Blatch., 453.

See Jurisdiction, page 108, and

EMPLOYER AND EMPLOYEE.

A large majority of the inventions of the past have been made by employes.

"The title and object of the Act of 1836 is to promote the progress of the useful arts, and patents are granted to inventors, not for their benefit simply, but for the purpose of benefiting the public by encouraging inventors to make inventions which may be useful to the public when placed at their disposal; and to place upon the records of the Patent Office a description of those inventions so that, after the expiration of the terms limited by their patents, the public may have the full advantage of their genius and discoveries." *Ransom v. Mayor of New York, I. Fish. P. C.*, 252.

"Patentees as a class are public benefactors, and their rights should be protected. But the public has rights also. The rights of both should be upheld, and enforced by an equally firm hand, wherever they come under judicial consideration." *Densmore v. Schofield*, 12 Otto, 375.

Many disputes have arisen and legal controversies resulted, by reason of claims made to the inventions of employes by employers.

When the nature of the employment calls for inventions, as when a person is employed to develop an invention or to devise mechanical ways and means to accomplish a particular purpose or purposes, his inventions in the line of the employment do not belong to the employer when expressed in the form of a patent, as seems to be generally understood; but the implied license of a shop-right—unlimited—to sell anywhere and everywhere in the face of the patent when obtained, which the courts uniformly hold belongs to employers under such circumstances greatly reduces the value of patents, and in some instances renders patents practically valueless to the employe-inventor; as where an article has but a limited demand, or a demand only in the particular channel of trade in which an employer is well established.

In the latter instance it will be a very difficult undertaking to enlist capital in an invention to manufacture and sell in direct competition with itself. True, such implied licenses are, as a rule, not assignable, and they are usually held to be "merely personal," but these facts, except in very exceptional cases, will not materially affect the given result.

Another rule very properly applies where the line of the employment does not call for inventive skill, as where a man is employed to operate a machine or to do work by common methods and makes inventions in the line of his work, or otherwise, however valuable, his inventions are wholly his own in the absence of an agreement expressed or implied, and none can be implied, as the "line of his employment" does not require inventive skill.

In these cases care should be taken that the inventions are not developed and reduced to practice at the ex-

pense of the employers, as they may claim shop-rights in them, by reason thereof; or at least the right to use the devices in their shops. Against the latter claim you will probably have no successful defense, and your success in defending the former will depend so much upon direct and extraneous circumstances as to make the efforts very uncertain in their results.

An employe anticipating the making of inventions, whatever may be the nature of the employment, will recognize the importance of having an agreement in writing with his employer with reference to them, or at least a memorandum in writing of the agreement, signed by his employer.

In the absence of a writing, whatever the verbal agreement may be, in case of a misunderstanding, an employer has the advantage of means, to prosecute or defend, which, as a rule, will force a compromise against the interests of an inventor. True, an inventor may shield himself under the wings of outside capital, but the wings will cost him so much of the invention as to make it a serious question with him which course he had better pursue; as a rule he will be the most fortunate to pursue the course leading to the speediest termination, as either will likely terminate his interests.

It is of almost equal importance to employers that written agreements be made with reference to the inventions of their employes, who are often "prone to wander" to other capital, and thus make justice very expensive.

If you ignore these facts and lose, in consequence, it will not be because my duty has been neglected. I have given you the "danger" signal and it remains for you to apply the brakes. Don't rush madly on in the hope that you may be an exception and "cross the bridge." The following decisions are cited in reference to these matters:

The mere fact of employment gives to the employer no title in letters patent of the inventions made by the workman while in his

service. A workman engaged to make improvements in the special machinery * * * * of which his employer is to have the fullest benefits forfeits no title to his letters patent for his inventions which are of general applicability, and not confined to the specialties of construction in the line in which he is employed. The terms of the particular contract may operate as a license to the employer to use machinery invented by the workman, and put in use during his employment, but it would not, of itself, confer any legal title to the invention, or to letters patent protecting it, hence—where the employer rested his suit for infringement on a legal title obtained under such circumstances, the court ruled that the equitable title of the workman under which the defendants justified was superior, and that there was no infringement. In a court of equity, a party holding an equitable title cannot be ousted of his equitable rights by the holder of the legal title, who, in such case, stands as trustee for the party beneficially interested. *Whiting v. Graves*, 13 O. G., 455.

If a person employed in the manufactory of another, while receiving wages, makes experiments at the expense and in the manufactory of his employer; has his wages increased in consequence of the useful result of the experiments, makes the article invented and permits his employer to use it, no compensation being paid for its use or demanded; and then obtains a patent on the invention, these facts will justify the presumption of a license to the employers to use the invention. *McClurg v. Kingsland*, 1 How., 202. See also similar decisions, *Chabot v. American Buttonhole and Over-Seaming Co.*, 6 Fish., P. C., 71; *Semmer's Appeal*, 58 Penn. St., 155.

Where the invention of the employe was constructed and used with his knowledge and with his consent, and was constructed under his direction, and put into defendant's factories, and used under his direction before and up to the date of his application for the patent; held, that such construction at an employer's expense while complainant was in his employ, operates as a special license to the employer to continue to use the invention. *Magoun v. New England Glass Co.*, 3 B. & A., 114.

"Persons are not deprived of their right to their inventions while in the service of others, unless they have been hired and paid to exercise their inventive faculties for their employer. A contract by which one person agrees to pay a sum of money for the time, labor and skill of another, for a given period, gives to the employer no right to an assignment of a patent that is issued to his employe for an invention made during the period of his employment. * * * * The defendant was not expressly required by his contract * * * *

to exercise his inventive faculties for the benefit of the company, and there is nothing in the bill from which it can be fairly inferred that he was required or expected to do so. "If the employer had no right to the invention by virtue of the terms of the defendant's contract of employment it was a mere naked license to make and sell the patented improvement as a part of his business. This right, if it existed, being a mere personal one, was not transferable, and it was extinguished with the dissolution of the corporation." Curtis on Pat. (4 Ed.), Sec. 213; *Windmill Co. v. Empire Windmill Co.*, 4 Fish., P. C., 428; *Hapgood v. Hewitt*, 11 Fed. Rep., 422; see also *Barry v. Crane Brothers' Mfg. Co.*, 22 Fed. Rep., 396.

An exclusive license for the use of a certain patented machinery invented and constructed during the term of his service, results to the employer where the workman agreed to give the employer the exclusive benefit of his inventive faculties, and of such inventions as he should make in a particular class of machinery during the period of employment. So, too, an agreement that the employer was to have the exclusive benefit of the workman's services in making machinery and improvements in the employer's premises operates to license the use of machinery, perfected and constructed, or in course of construction during the term of service, although it had actually been invented and patented by the workman prior to such service. *Wilkens v. Spafford*, 13 O. G., 675.

"This action is based upon the breach of an alleged contract between the parties, (both of whom at the time resided in this State) [Wisconsin] to assign the right to the patent for the invention. In this case there can be no question but what the State Court properly took jurisdiction. *Nesmith v. Calvert*, 1 Wood. and M. 34; *Hartell v. Tilghman*, 99 U. S., 547, and cases there cited.

* * * * It is here claimed, in effect, that the plaintiff expended several thousand dollars in perfecting the device in question, and bringing it into public use, upon the faith of an implied contract with the defendant that he would, upon completion, assign to the plaintiff such invention, and his right to letters patent therefor, but which he refused to do, after being duly requested. This suit is brought to enforce the specific performance of such implied contract.

* * * * In *Binney v. Annan*, 107 Mass., 94, a bill to compel the specific performance of a contract to procure a patent, and then assign it to the plaintiff, was held good. The same principle has been repeatedly sanctioned. *Continental Wind Mill Co. v. Empire Wind Mill Co.*, 4 Fish. P. C. 428; *Wilkins v. Spafford*, 3 B. and A., 274; *Andrews v. Fielding*, 20 Fed. Rep. 123; *Hapgood*

v. Rosenstock, 23 Fed. Rep. 86. * * * * The mere fact that, in making the invention, an employe uses the materials of his employer, and is aided by the services and suggestions of his co-employes and employer, in perfecting and bringing the same into successful use, is insufficient to preclude him from all rights thereto as inventor. [See *Scientific Aid*, page 12.] The same is true of an invention conceived wholly by an employer, and then perfected under his supervision, by aid of the mechanical skill and suggestions of his employes. These propositions are sanctioned by numerous adjudications. *Agawam Co. v. Jordan*, 7 Wall., 602, *Collar; Co. v. Vandusen*, 23 Wall., 563; *Blandy v. Griffith*, 3 Fish, P. C., 615; *King v. Gedney*, 1 McA. (D. C.), 444. The difficulty with the contrary assumption arises from confounding the machine with the invention it embodies. Of course there must be a machine which will operate before it can be patented. That implies material, workmanship and skill combined. But such combination of itself is not enough to secure a patent. It must also embody an original conception of a new and useful method of doing a specific thing. It is this conception so embodied, evolved from the inventive faculties of the defendant, which constituted the invention in question. The law gave to him the exclusive property in it. He still retains it, except in so far as he has parted or agreed to part with it. The material, workmanship and skill which embodied that conception remained the property of the plaintiff. But workmanship and skill are both the result of instruction, experience and knowledge. They are acquired by being learned. They may aid and stimulate invention, but are no part of it. * * * * The question remains whether the plaintiffs, as such licensee (implied) is entitled to any relief in this action. In the very recent case of *Hapgood v. Hewett*, (*supra*), the bill of complaint was substantially like the one at bar, * * * * and sought to compel an assignment of a patent by the employe to the successors of the employer. A demurrer thereto, for want of equity, was sustained, and thereupon a decree was entered, dismissing the bill, and the same has just been affirmed by the Supreme Court of the United States. It was there held that Hewett, as such employe, took the legal title to the patent in his own right, and not as trustee for his employer, and that the latter, at most, had a mere license to manufacture: that, as such license would be a perfect defense to an action at law for the infringement of the patent, relief in equity was properly denied, and the bill properly dismissed. To the same effect is the case of *Joliet Mfg. Co. v. Dice*, 105 Illinois, 649. * * * * In *Wilkins v. Spafford*, (*supra*), the employer contracted for the exclusive benefit of the employe's inventive facul-

ties and inventions during his term of service, and an exclusive license for the use of the machines during the existence of the patents, and any extensions, renewals or re-issues of the same was decreed. * * * * The judgment of the Circuit Court is reversed, and the cause is remanded, with directions to render judgment in favor of the plaintiff, and against the defendant, to the effect that the latter execute and deliver to the former a license to manufacture machines embodying the invention in question at its present works, perpetually, and to sell the same anywhere in the market, free and clear from any and all liability for any fee, royalty, or otherwise, for or on account of any patent which has been or may hereafter be granted for said invention; and, in case of failure to so execute such license within a time to be named, then that such judgment stand as and for such license, and to have that effect; and for any other and further proceedings deemed necessary to make such effectual." *Fuller & Johnson Mfg. Co. v. Bartlett*, 31 N. W. Rep., 747. (Supreme Court, Feb. 1st, 1887.)

Upon a suit under section 4915, Revised Statutes, a court of equity will not aid the inventor to obtain a patent for himself in direct violation of his agreement transferring the property in his invention. *Runstetler v. Atkinson*, 23 O. G., 940.

Where an inventor of a new machine, before a patent issues, makes a full and complete assignment of all his right to another person, the assignee may have the patent issued in his name. Such are the judicial decisions, and such has been the law in continued and unvarying practice of the Patent Office; but where the transfer or assignment of the inventor's right is only partial, although the part excepted may be very small * * * * the assignee does not have any legal claim to the patent. He must allow it to go out in the name of the inventor, and be held by him in trust for the use of the assignee to the extent of the equities which he has by virtue of his contract. *Wilson Ager's Inventions*; *Black's Opinion*, 9 Op.. 403.

An assignment of an imperfect invention with all the improvements upon it that the inventor may make is equivalent in equity to an assignment of the perfected results. In such case the assignees become in equity the owners of the patent issued upon the invention when perfected, and, if the assignor takes the legal title, he holds it in trust for them and should convey. In a contest between an assignor in equity, and his assignee, the court of equity will give the same effect to an equitable title that it would to one that was legal. *Littlefield v. Perry*, 7 O. G., 964.

See *Scientific Aid*, page 12; *Partnership*, page 93; *Undivided Interests*, page 65; *Insolvency*, page 114; *Joint Inventors*, page 27.

EXPERTS.

The statute defines the character of an expert as one "skilled in the art or science to which his opinion or judgment appertains", or in a business or art most nearly connected with that to which his judgment or opinion is applied. A skillful saw mill builder is an expert in that business; and one familiar with constructing saw-mills is, in that respect, an expert; and a skillful saw-mill machine maker is an expert in the structure of saw-mills as connected with his own pursuit. *Page v. Ferry, 1 Fish., P. C., 306.*

Experts may be examined to explain terms of art, and the state of the art at any given time. They may explain to the Court and jury the machines, models, or drawings exhibited. They may point out the difference or identity of the mechanical devices involved in their construction. The maxim of "*cinque in sua arte credendum*" permits them to be examined on questions of art or science peculiar to their trade or profession; but professors or mechanics cannot be received to prove to the court or jury what is the proper or legal construction of any instrument in writing. A judge may obtain information from them, if he desires it, on matters which he does not clearly apprehend, but cannot be compelled to receive their opinions as matters of evidence. Experience has shown that opposite opinions of persons professing to be experts may be obtained to any amount; and it often occurs that not only many days, but even weeks, are consumed in cross-examinations to test the skill or knowledge of such witnesses, and the correctness of their opinions; wasting the time, and wearing out the patience of both court and jury; perplexing instead of elucidating the question involved in the issue. * * * * *Winans v. New York & Erie Railroad Co., 21 How., 88.*

Great respect is due to the opinions of professional men, on matters which relate to their professions. On such subjects, and on such subjects only, are the opinions of witnesses received as evidence. This rule applies as strongly to mechanics as to any other profession or business. * * * * The science of mechanics is no contracted profession. It affords a range for the highest mental vigor, and requires as deep thought, as nice a discrimination, as any other pursuit. The lights of chemistry and all the highest branches of mathematics are subservient to it. No one can be an accomplished mechanic who has not studied with some success the laws of physics. *Brooks v. Morris, 3 McL., 432.* See Employer and Employe, page 114.

FOREIGN PATENTS.

Foreign patents on good and valuable inventions, as a rule, bring meagre, if any, net returns, and I very much question the advisability of procuring patents on inventions in foreign countries, except on those inventions that are in an entirely new field or that are the first inventions of their kind, and then it will be well to fully understand from your Patent Solicitor the patent laws of the country before an application is made for a patent therein. You may learn that the conditions under the laws are such as to amount to a bar to your success, however meritorious your invention.

You should decide with reference to applying for a foreign patent before your application is filed for a patent on the same invention in the United States Patent Office, and file your applications, both at home and abroad, at the proper times, to save all of your rights in all countries in which you are to obtain patents.

In many countries a patent on an invention expires with the patent on the same invention in any other country, regardless of its date. In the United States a patent will expire at the same time of a previous patent on the same invention in any other country.

NOTE.—By the terms of the convention of nations for the protection of industrial property, recently ratified by the President, citizens of the United States have the privilege not hitherto enjoyed by them of obtaining valid patents in any of the countries which are members of the convention at any time within the period of seven months after a patent is obtained in the United States. The countries of the industrial union are Belgium, Brazil, France, Great Britain, Guatemala, Holland, Norway, Portugal, Salvador, San Domingo, Servia, Spain, Sweden, Switzerland, Tunis, and the United States.

"No person shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid by reason of its having been first patented or caused to be patented in a

foreign country, unless the same has been introduced into public use in the United States for more than two years prior to the application. But every patent granted for an invention which has been previously patented in a foreign country shall be so limited as to expire at the same time with the foreign patent; or if there be more than one, at the same time with the one having the shortest term, and in no case shall it be in force more than seventeen years." U. S. Revised Statutes, Sec. 4887.

It is only a patent for an invention that has been previously actually patented in a foreign country that is limited by the foreign patent. The description of the invention in the foreign patent might affect the validity of the domestic one, and might not, but would not limit it. "U. S. Revised Statutes, Sec. 4887." Holmes Electric Protective Co., 22 Fed. Rep., 341.

The above section 4887 of the Revised Statutes, with reference to U. S. patents expiring at the same time of previously patented foreign patents on the same invention does not include any extension of foreign patents, so where a patent was obtained in Canada for five years, and extended for five years longer under the Canadian Patent Law, it was held that the patent on the same invention in the United States, granted after the patent originally issued in Canada, expired with the end of the original term of five years. Held, that if Congress had intended otherwise, the language of the Statutes would have been different, and words would have been employed to signify that the domestic patent should continue as long as the same invention was protected by the foreign government. *Reissner v. Sharp*, 16 Blatch., 378.

The grant of a foreign patent previous to a patent on the same invention in the United States does not affect the term of the United States patent, if a foreign patent has been declared void *ab initio* by a court of competent jurisdiction, unless, and until, the judgment be reversed on appeal. It is the legal consequence of such judgment, that the foreign patent never had, in fact, any existence, and that, hence, it can have no effect in shortening the term of the American patent. *Bate Refrigerator Co. v. Gillett*, 20 Fed. Rep., 192.

See Void Patents, page 104; Jurisdiction, page 108.

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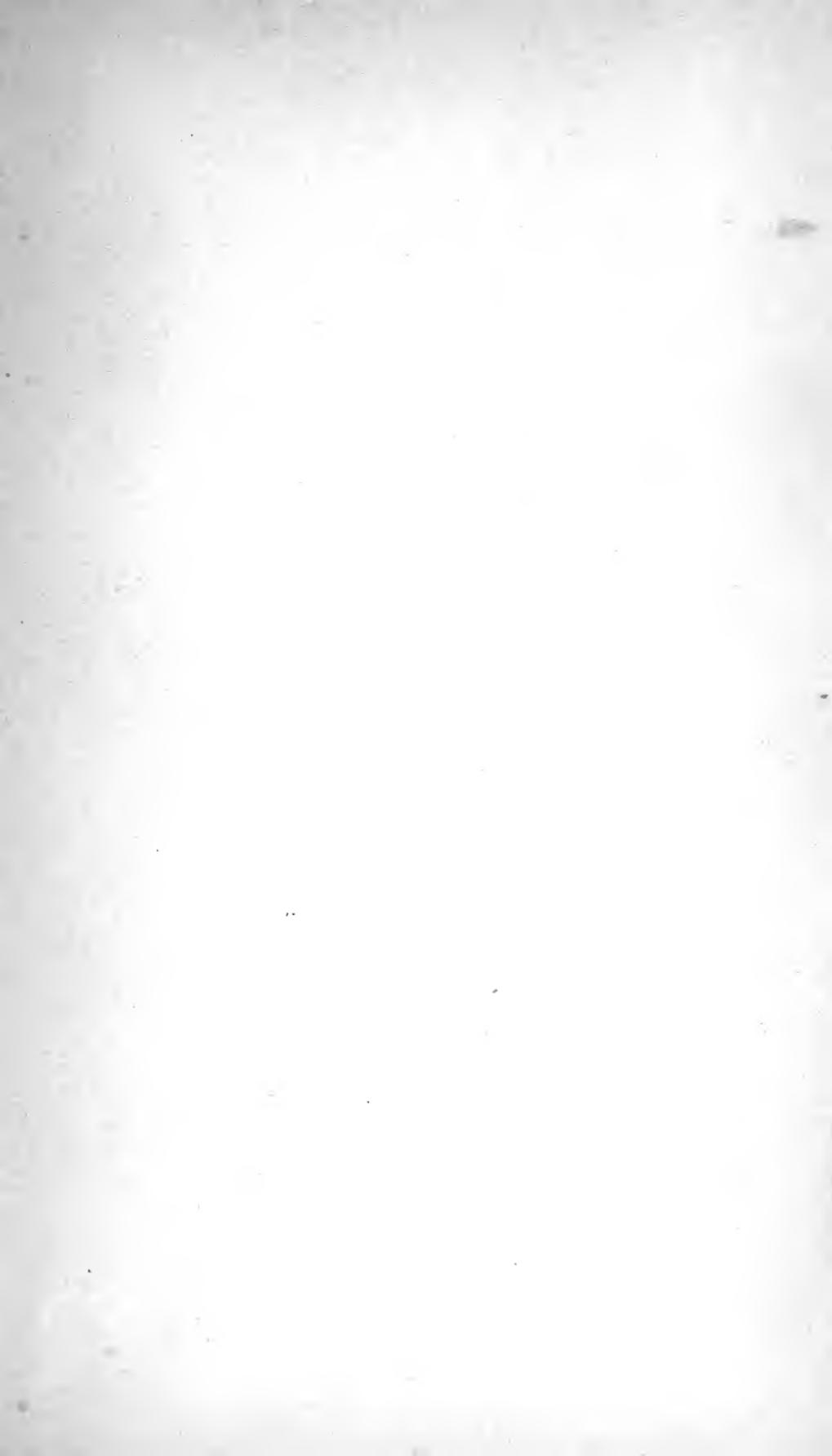
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